TEACHING LITERACY IN TENNESSEE: UNIT STARTER
GRADE 2

Important Note: *The unit starter provides the foundation for unit planning. In addition to thoughtful preparation from these resources, there are additional components of the literacy block for which educators will need to plan and prepare. See page 5 for more guidance on planning for other components of the literacy block.*

This unit starter is being released in draft form to be pilot tested in classrooms across Tennessee. The Tennessee Department of Education is committed to improving this resource to meet the needs of Tennessee educators and students and welcomes feedback on the design and usability of the unit starter. Please share your feedback through our online feedback form here. The department will use this feedback to improve this resource and inform the development of future resources.

TABLE OF CONTENTS

GUIDANCE FOR EDUCATORS

1. WHY IS THE DEPARTMENT PROVIDING UNIT STARTERS?

The research is clear: reading proficiently—especially reading proficiently early—prepares students for life-long success. To support greater reading proficiency among all students in Tennessee, Governor Haslam, the First Lady, and Commissioner McQueen kicked off the Read to be Ready campaign in February 2016 with a goal of having 75 percent of Tennessee third graders reading on grade level by 2025. Together, we are making progress. High-quality texts that meet grade-level expectations are increasingly making their way into classrooms. Students are spending more time reading, listening, and responding to texts that have the potential to build both skill-based and knowledge-based competencies. However, the first year of the initiative has revealed a need for strong resources to support the growing teacher expertise in Tennessee.

Earlier this year, the Tennessee Department of Education released Teaching Literacy in Tennessee. This document outlines the types of opportunities students need to become proficient readers, writers, and thinkers, and includes a literacy unit design framework describing the ways that teachers can create these opportunities. This includes building rich learning opportunities around meaningful concepts within the English language arts block where students listen to, read, speak, and write about sets of texts that are worthy of students' time and attention. The department is committed to providing continued support to teachers and leaders in implementing this vision for literacy, which is why we are excited to release our second set of Teaching Literacy in Tennessee: Unit Starters for grades K-3.

The resources found in each of the Teaching Literacy in Tennessee: Unit Starters are intended to support planning for one full unit aligned to the vision for Teaching Literacy in Tennessee. They are intended to serve as a model to reference as educators continue to design units and compare the alignment of lessons to the vision for Teaching Literacy in Tennessee.

2. WHAT RESOURCES ARE INCLUDED IN A UNIT STARTER?

The unit starters include several of the key components in the framework for Teaching Literacy in Tennessee. These components serve as the foundation for strong unit planning and preparation.

Content Goals: Each unit starter begins with content goals that articulate the desired results for learners. [Adapted from McTighe, J. & Seif, E. (2011) and Wiggins, G. & McTighe, J. (2013)]

Universal Concept: A concept that bridges all disciplinary and grade-level boundaries. This concept provides educators and students with an organizational framework for connecting knowledge across disciplines into a coherent view of the world.

Universal Concept Example: Interdependence

Unit Concept: The application of the universal concept to one or more disciplines. This concept provides students with an organizational framework for connecting knowledge within the disciplines into a coherent view of the world and provides educators with a focus for unit planning.

Unit Concept Example: Interdependence of living things

Enduring Understandings and Essential Questions: The ideas we want students to understand, not just recall, from deep exploration of our unit concept and the corresponding open-ended questions that will guide students' exploration of these ideas. The enduring understandings reflect the abstract, easily misunderstood, "big" ideas of the discipline. They answer questions like "Why?" "So what?" and "How does this apply beyond the classroom?" to support deep levels of thinking. These questions spark genuine and relevant inquiry and provoke deep thought and lively discussion that will lead students to new understandings.

Enduring Understanding Example: People, plants, and animals depend on each other to survive.
Essential Question Example: Why do humans need to preserve trees?

Disciplinary Understandings and Guiding Questions: Disciplinary understandings are the specific ideas and specialized vocabulary of the discipline. These ideas will focus instruction, build disciplinary knowledge, and provide the schema to organize and anchor new words. Student understanding of these content-related ideas is critical to investigation and understanding of the more abstract and transferable ideas outlined in the enduring understandings. Guiding questions are open ended and guide students' exploration of the disciplinary understanding. These questions prompt ways of thinking and support knowledge building within the content areas.

Disciplinary Understanding Example: The structure of plants and the function of each part
Guiding Question Example: Why are roots important to plants?

The concepts for this set of unit starters were derived from the vertical progression of Tennessee's Life Science Standards and focus on plant and animal life. These standards are represented below. **Though strong connections are made to the science standards within the unit, it is critical to note that this unit starter does not encompass the totality of the identified science standards. The unit is not intended to replace instruction and hands-on application of the science standards and practices.**

Kindergarten (K.LS1)

- K.LS1.1 Use information from observations to identify differences between plants and animals (locomotion, obtainment of food, and take in air/gasses).
- K.LS1.2 Recognize differences between living organisms and non-living materials and sort them into groups by observable physical attributes.

Grade 1 (1.LS1)

- 1.LS1.1 Recognize the structure of plants (roots, stems, leaves, flowers, fruits) and describe the function of the parts (taking in water and air, producing food, making new plants).
- 1.LS1.2 Illustrate and summarize the life cycle of plants.

Grade 2 (2.LS1)

- 2.LS2.1 Use evidence and observations to explain that many animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.
- 2.LS1.3 Use simple graphical representations to show that species have unique and diverse life cycles.

Grade 3 (3.LS1)

- 3.LS1.1 Analyze the internal and external structures that aquatic and land animals and plants have to support survival, growth, behavior, and reproduction.

Texts for Interactive Read Aloud & Shared Reading: Each unit starter includes a collection of complex texts to support strong interactive read aloud and shared reading experiences. These texts have been selected to provide regular opportunities for students to engage with rich academic language and build the disciplinary and enduring understandings for the unit. Given the complexity of these texts, teachers should revisit them with students after the initial read(s) to deepen knowledge. Multiple question sequences and tasks are included in the unit starter for most texts; however, teachers are encouraged to add additional readings, questions, and tasks as needed to meet the needs of their students. Teachers may also analyze and select additional suitable texts to extend and/or support the development of the unit concepts. *See page 38 in* Teaching Literacy in Tennessee *for the three-part model for determining text complexity: quantitative dimensions of text complexity; qualitative dimensions of text complexity; and reader and task considerations.*

Suggested Resources for Small Group & Independent Reading: The unit starters include a list of suggested resources (texts, videos, online resources) to support a volume of reading on the unit concepts. These materials may be used during small group instruction and/or independent reading and writing activities to support knowledge building for students and to meet students' diverse learning needs. In addition, teachers are encouraged to select additional resources to extend and/or support the development of the unit concepts.

End-of-Unit Task: Each unit starter includes an end-of-unit task that provides an opportunity for students to demonstrate their understanding of the unit concept and to answer the essential questions for the unit in an authentic and meaningful context.

Daily Tasks & Question Sequences: Each unit starter includes a daily task and question sequence for approximately two weeks of instruction. The question sequences integrate the literacy standards to support students in accessing the complex texts during interactive read aloud and shared reading by drawing students' attention to complex features in the text and guiding students toward the disciplinary and/or enduring understandings of the unit.

The daily tasks provide an opportunity for students to demonstrate their new understandings by applying what they have learned from the texts they read daily across the literacy block. The texts and tasks have been carefully sequenced to support students in building disciplinary understandings over the course of the unit, so students are able to successfully engage in the end-of-unit task.

Sidebar Notes: As you navigate this document, you will also see that sidebar notes have been included throughout. These notes are intended to: 1) highlight additional rationale that may be of interest to educators; and 2) point out specific changes that have been made to the second iteration of unit starters based on feedback from the first set.

3. WHAT RESOURCES ARE NOT INCLUDED IN A UNIT STARTER?

These resources provide the foundation for unit planning but are not intended to be a comprehensive curriculum resource. Instead, educators must thoughtfully prepare from the resources that are included in the unit starter by adding additional resources as appropriate to meet instructional goals and student needs.

In addition, teachers will need to plan for other components of the English language arts block. The unit starters **do not include** the following:

- Instructional guidance for small group and independent reading and writing
  - Students should be grouped flexibly and resources selected to meet specific and unique needs of students, which may change over time.
- Instructional guidance and resources for explicit foundational skills instruction and foundational skills practice in and out of context
  - Reading foundational skills instruction should follow a year-long scope and sequence and be responsive to the unique needs of your students.

Please refer to Teaching Literacy in Tennessee for definitions of new or unfamiliar terms used in this document.

4. HOW SHOULD I USE THE RESOURCES IN THE UNIT STARTER TO PLAN MY UNIT?

Interactive Read Aloud and Shared Reading Experiences

To prepare for the unit, start by thoroughly reviewing the resources that are included in the unit starter. These resources are designed to support students in thinking deeply about the unit concepts and the enduring understandings embedded in complex text through interactive read aloud and shared reading experiences. To support this step, a unit preparation protocol and a lesson preparation protocol are included in Appendices A and B.

Small Group Reading and Writing

In addition to interactive read aloud and shared reading experiences, plan small group instruction to support the diverse needs of students in your classroom. Group students flexibly and select texts that address students' strengths (e.g., prior knowledge) and meet their specific needs:

Accuracy/word analysis: Some students may need additional practice with foundational reading skills that have already been taught and now are applied to reading authentic texts.

Fluency: Some students may be strong decoders but still struggle to read fluently, which holds them back from successful comprehension.

Comprehension: Some students may require support for their use of comprehension skills and strategies for building knowledge and acquiring academic vocabulary.

The unit starters include a list of suggested resources (texts, videos, online resources) that can be used to support small group instruction.

Modeled, Shared and Interactive Writing

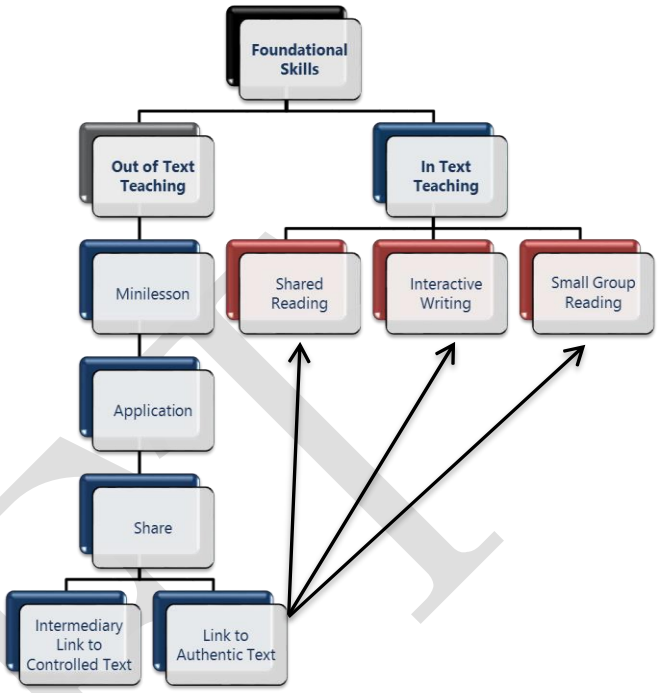
To prepare students for success on the daily and end-of-unit tasks in the unit starter, plan for modeled, shared and interactive writing opportunities. Modeled writing is an instructional strategy where the teacher explicitly demonstrates the writing process for different forms and purposes. Shared writing is an instructional strategy where the teacher and students compose a text together with the teacher acting as the scribe. Interactive writing is an extension of shared writing in which the teacher and students compose a text together with the teacher strategically sharing the pen during the process.

Independent Reading and Writing

The Tennessee English Language Arts Standards call for students to read a range of literary and informational texts and to engage in a high volume of reading independently. The standards also call for students to have aligned writing experiences that develop their skills as writers and support their comprehension of rich, complex texts. Plan for how you will use the suggested resources to engage students in a variety of reading and writing experiences. Consider setting up systems for accountability during independent work time such as one-on-one conferences, center assignments, and/or accountable independent reading structures.

See pages 41-43 in Teaching Literacy in Tennessee for a description of these instructional strategies and their purpose within the literacy block.

Explicit Foundational Skills Instruction
It is recommended that educators consult the Foundational Literacy Standards and use a systematic phonics sequence (often found within a phonics program) for foundational skills instruction in conjunction with the resources in the unit starter. Strong foundational skills instruction follows an intentional, research-based progression of foundational skills that incorporates phonological awareness, phonics, and word recognition.



Foundational Skills Practice Out of Text and In Text
Strong foundational skills instruction includes opportunities for students to practice their newly acquired skills out of text and in text.

Out of text instruction may take the form of mini-lessons and hands-on application through activities, such as word sorts or the use of manipulatives.

In text instruction provides opportunities across the literacy block for students to further apply their new learning in authentic reading and writing texts. Foundational skills assessments should be ongoing and should be used to determine when students have mastered the skill and are ready to move on to the next skill.

See pages 78-79 in Teaching Foundational Skills Through Reading and Writing Coach Training Manual *for more information about the relationship between out of text and in text teaching.*

Structures for Academic Talk & Collaboration
The unit starters include suggestions for questions and daily tasks, but they do not include guidance on how to structure sharing/discussion time. Consider planning how your students will engage with you and each other when responding to complex text orally or in writing by incorporating things like expectations for talk time, sentence starters, hand signals, etc.

5. WHAT MATERIALS DO I NEED TO ORDER AND PRINT?

Texts for Interactive Read Aloud & Shared Reading
Each of the texts included in the unit starters can be purchased or accessed online or through a local library. A list of these texts is included in the unit starter materials. Educators will need to secure, purchase, or print one copy of each text selected to support interactive read aloud experiences. Each student will need a copy of the selected text for the shared reading experiences, unless the text is projected or displayed large enough for all students to read.

Suggested Texts for Small Group & Independent Reading
Additionally, each of the texts suggested for small group and independent reading can be purchased or accessed online or through a local library.

Materials to Be Printed
The unit starters can be accessed digitally here.

Educators may also consider printing:

- **Question Sequence –** Teachers may want to print question sequences or write the questions on sticky notes to have them available during interactive read aloud and shared reading experiences.

- **Daily Task –** Teachers may want to print the teacher directions for the daily task.
- **End-of-Unit Task –** Teachers may want to print the teacher directions for the end-of-unit task.

6. WHERE CAN I SHARE MY FEEDBACK ON THE UNIT STARTER?

The Tennessee Department of Education welcomes any feedback you have on the design and usability of the Teaching Literacy in Tennessee: Unit Starters. Please share your feedback through our online feedback form here.

UNIT OVERVIEW

The diagram on the next page provides a high-level overview of the unit.

Guidance for the central text and suggested strategy for each day of instruction has been provided in the unit starter. It is important to note that this guidance does not reflect a comprehensive literacy block. Educators should support students in developing their expertise as readers and writers by flexibly utilizing a variety of instructional strategies throughout the literacy block.

Educators are also encouraged to use the guidance from this unit starter flexibly based on the needs, interests, and prior knowledge of students. For example, teachers may decide to re-read a text, pull in supplementary texts, or provide additional scaffolding based on their knowledge of their students. Teachers are encouraged to be strategic about how many instructional days to spend on this unit.

This unit starter is organized around three questions: (1) What are the desired results for learners? (2) How will students demonstrate these desired results? (3) What learning experiences will students need to achieve the desired results?

UNIT OVERVIEW

WHAT ARE THE DESIRED RESULTS FOR LEARNERS?

By the end of this unit, students will have developed an understanding of the following concepts and will be able to answer the following questions.

Universal Concept: Mutually Supportive Relationships

Unit Concepts: Life cycles of animals are diverse and observable. Animal characteristics and their behaviors are important for their survival.

Enduring Understandings: Similar to plants, animal life cycles have predictable stages (birth, growth, reproduction, death). However, unique differences within those stages may be observed among some animals.

Throughout their life cycles, animals have observable characteristics (camouflage) that support growth and survival.

Throughout their life cycles, animals have observable behaviors (e.g. grasping objects, protecting themselves, moving from place to place, seek, find, and taking in food, water, and air) that support growth and survival.

Essential Questions: How does evidence and observations of animals' external structures and characteristics inform why they behave in similar and different ways throughout their life?

How do animals' behaviors and characteristics help them progress through a life cycle?

Disciplinary Understandings: The patterns of life are cyclical.

Life cycles are unique.

Organisms must survive to be able to reproduce and continue the life cycle.

Guiding Questions: How do living things experience life similarly? How do living things experience life differently? How do living things survive?

HOW WILL STUDENTS DEMONSTRATE THESE DESIRED RESULTS?

Students will synthesize their learning from the unit texts and demonstrate understanding in the following authentic and meaningful context.

End-of-Unit Task: You are the Animal Ambassador at the local zoo. At the zoo's learning center, your job is to teach school groups about animals' life cycles, behaviors, and characteristics. Using information from our texts in this unit, select at least two animals with different life cycles. Your boss has asked you to turn in a written copy of your explanation for how your animals' life cycles are similar and different before you teach the first group of students. Be sure to include: (1) how each animal changes throughout all stages of the life cycle, (2) how the animals' or their parents' behaviors help them survive, (3) how the animals' characteristics help them survive, and (4) at least two life cycle illustrations.

In your written copy to your boss:

- Introduce each animal.
- Use unit facts, vocabulary, and definitions from the texts to compare and contrast the life cycles of at least two different animals.
- Provide a conclusion.
- Use evidence from all information you have learned in the unit.
- Write in complete sentences. Use correct capitalization, punctuation, and spelling.

Your boss also wants you to practice presenting to your fellow ambassadors.

A Venn diagram may be helpful prior to writing to allow you to organize your thinking. You may also use your journal, diagrams, round robin writing, and anchor chart for support.

WHAT LEARNING EXPERIENCES WILL STUDENTS NEED TO ACHIEVE THE DESIRED RESULTS?

Students will achieve the desired results as a result of deep exploration of complex texts through interactive read-aloud (IRA) and shared reading (SR) experiences with the following texts.

What Is a Life Cycle? (IRA)

Into the Sea (IRA)

A Butterfly Is Patient (IRA)

My Awesome Summer by P. Mantis (SR)

"Fly, Dragonfly!" (SR)

Born in the Wild (IRA)

UNIT CONTENT GOALS

This unit starter was created with several levels of conceptual understanding in mind. Each conceptual level serves an instructional purpose, ranging from a universal concept that bridges disciplinary boundaries to concrete disciplinary understandings that focus instruction around specific schema. The diagram below shows the conceptual levels and questions that were considered during the development of all of the unit starters. The diagram on the following page outlines the specific concepts and questions for this Second Grade unit starter.

Universal Concept: A concept that bridges all disciplinary and grade-level boundaries (i.e., super-superordinate concept). This concept provides students with an organizational framework for connecting knowledge across disciplines into a coherent view of the world. (Example: Interdependence)

Unit Concept: The application of the crosscutting concept to one or more disciplines (i.e., superordinate concept). This concept provides students with an organizational framework for connecting knowledge within the disciplines into a coherent view of the world and provides educators with a focus for unit planning. (Example: Interdependence of living things)

Enduring Understandings: The ideas we want students to understand, not just recall, from deep exploration of our unit concept. The enduring understandings reflect the abstract, easily misunderstood, "big" ideas of the discipline. They answer questions like "Why?" "So what?" and "How does this apply beyond the classroom?" to support deep levels of thinking. (Example: People, plants, and animals depend on each other to survive.)

Essential Questions: Open-ended questions that guide students' exploration of the enduring understandings or "big" ideas of the discipline. These questions spark genuine and relevant inquiry and provoke deep thought and lively discussion that will lead students to new understandings. (Example: Why do humans need to preserve trees?)

Disciplinary Understandings: The specific ideas and specialized vocabulary of the discipline. These ideas will focus instruction, build disciplinary knowledge, and provide the schema to organize and anchor new words. Student understanding of these key ideas is critical to investigation and understanding of the more abstract and transferable ideas outlined in the enduring understandings. (Example: The structure of plants and the function of each part.)

Guiding Questions: Open-ended questions that guide students' exploration of the disciplinary understandings in the unit and refer specifically to the domain (e.g., ecosystems). These questions prompt ways of thinking and perceiving that are the province of the expert. (Example: Why are roots important to plants?)

UNIT CONTENT GOALS

The diagram below shows the conceptual levels and questions that were considered during the development of this unit starter. The diagram below outlines the specific concepts and questions for the Second Grade unit starter.

Universal Concept:
Mutually Supportive Relationships

Note: The universal concept for the second set of unit starters is the same across grade levels. However, not all units that are rooted in aligned disciplinary standards necessarily need to have the same universal concept. For example, the first set of unit starters included different universal concepts for all four unit starters.

Unit Concepts:
Life cycles of animals are diverse and observable.
Animals' characteristics and their behaviors are important for their survival.

Enduring Understanding:
Similar to plants, animal life cycles have predictable stages (e.g., birth, growth, reproduction, death). However, unique differences within those stages may be observed among some animals.

Enduring Understanding:
Throughout their life cycles, animals have observable characteristics (e.g., camouflage) that support growth and survival.

Enduring Understanding:
Throughout their life cycles, animals have observable structures and behaviors (e.g., grasping objects, protecting themselves, moving from place to place, seek, find, and taking in food, water, and air) that support growth and survival.

Essential Questions:
How does evidence and observations of animals' external structures and characteristics inform why they behave in similar and different ways throughout their life?
How do animals' behaviors and characteristics help them progress through a life cycle?

Disciplinary Understanding:
The patterns of life are cyclical.

Disciplinary Understanding:
Life cycles are unique.

Disciplinary Understanding:
Organisms must survive to be able to reproduce and continue the life cycle.

Guiding Question:
How do living things experience life similarly?

Guiding Question:
How do living things experience life differently?

Guiding Question:
How do living things survive?

2.LS2.1 Use evidence and observations to explain that many animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

2.LS1.3 Use simple graphical representations to show that species have unique and diverse life cycles.

UNIT STANDARDS

The questions and tasks outlined in this unit starter are aligned with the following Tennessee English Language Arts and Science Standards. As you will see later in the unit starter, the question sequences and tasks for each text integrate multiple literacy standards to support students in accessing the rich content contained in the texts.

ALIGNED STANDARDS: INFORMATIONAL TEXT

2.RI.KID.1: Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

2.RI.KID.3: Describe the connections between a series of historical events, scientific ideas or steps in a process in a text.

2.RI.CS.4: Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

2.RI.IKI.7: Identify and explain how illustrations and words contribute to and clarify a text.

2.RI.IKI.8: Describe how reasons support specific points an author makes in a text.

2.RI.IKI.9: Compare and contrast the most important points presented by two texts on the same topic.

2.RI.RRTC.10: Read and comprehend stories and informational texts throughout the grades 2-3 text complexity band proficiently, with scaffolding at the high end as needed.

ALIGNED STANDARDS: LITERATURE

2.RL.KID.1: Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

2.RL.KID.3: Describe how characters in a story respond to major events and challenges.

2.RL.CS.4: Describe how words and phrases supply meaning in a story, poem, or song.

2.RL.RRTC.10: Read and comprehend stories and poems throughout the grades 2-3 text complexity band proficiently, with scaffolding at the high end as needed.

ALIGNED STANDARDS: WRITINIG

2.W.TTP.1: Write opinion pieces on topics or texts. (a.) Introduce topic or text. (b.) State an opinion. (c.) Supply reasons to support the opinion. (d.) Use linking words to connect the reasons to the opinion. (e.) Provide a concluding statement or section.

2.W.TTP.2: Write informative/explanatory texts. (a.) Introduce a topic. (b.) Use facts and definitions to provide information. (c.) Provide a concluding statement or section.

2.W.TTP.3: Write narratives recounting an event or short sequence of events. (a.) Include details to describe actions, thoughts, and feelings. (b.) Use time order words to signal event order. (c.) Provide a sense of closure.

2.W.RBPK.7: Participate in shared research and writing projects, such as exploring a number of books on a single topic or engaging in science experiments to produce a report.

2.W.RBPK.8: Recall information from experiences or gather information from provided sources to answer a question.

2.W.RW.10: With guidance and support from adults, engage routinely in writing activities to promote writing fluency.

ALIGNED STANDARDS: SPEAKING & LISTENING

2.SL.PKI.5: Add audio or visual elements to stories or recounts of experiences, when appropriate, to clarify ideas, thoughts, and feelings.

2.SL.CC.1: Participate with varied peers and adults in collaborative conversations in small or large groups about appropriate 2nd grade topics and texts.

2.SL.CC.2: Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

2.SL.CC.3: Ask and answer questions about what a speaker says in order to gather information or clarify something that is not understood. (Students could ask for question and answers from the peer groups they present to).

ALIGNED STANDARDS: SCIENCE

2.LS1.1 Use evidence and observations to explain that many animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

2.LS1.3 Use simple graphical representations to show that species have unique and diverse life cycles.

TEXTS FOR INTERACTIVE READ ALOUD & SHARED READING

These texts have been selected to provide regular opportunities for students to engage with rich academic language and to build the disciplinary and enduring understandings for the unit. They have been vetted for quality and complexity to support strong interactive read aloud and shared reading experiences.

The texts selected for interactive read aloud are intended to build students' comprehension of vocabulary, rich characters, engaging plots, and deep concepts and ideas across a variety of genres. These texts will typically be 1-3 grade levels above what students can read on their own.

The texts selected for shared reading are intended to provide opportunities for students to practice newly acquired foundational skills, to develop reading fluency, and to build knowledge across a variety of genres. Shared reading texts should be appropriately complex text that students can read with teacher guidance and support. Teachers will need to take the grade level and time of year into account when deciding if the shared reading texts are appropriate for their students. Teachers will also need to consider students' current abilities and the pace at which students need to grow to meet or exceed grade-level expectations by the end of the year. If the shared reading texts included in the unit starter are not appropriate for the specific group of students and time of year, educators are encouraged to make an informed decision about selecting a different text for shared reading. The shared reading texts in this unit starter are appropriate for instruction closer to the end of the academic school year. Later in the unit starter, you will see an example of different texts that may be more appropriate for different times of the year.

While preparing for instruction, educators are urged to carefully consider the needs and interests of the readers, including how to foster and sustain new interests, and to be strategic about the types of tasks that will support readers in deeply engaging with these rich texts. Teachers should also consider how they will make connections to students' prior knowledge and students' cultural and previous academic experiences. Teachers need to consider the vocabulary demands of the text and the level of support readers will need to deeply understand the text.

TITLE	AUTHOR
What Is a Life Cycle?	Bobbie Kalman
Into the Sea	Brenda Guiberson
A Butterfly Is Patient	Dianna Aston and Sylvia Long
My Awesome Summer by P. Mantis	Paul Meisel
"Fly, Dragonfly!"	Joyce Sidman
Born in the Wild: Baby Mammals and Their Parents	Lita Judge

SUGGESTED RESOURCES FOR SMALL GROUP & INDEPENDENT READING

These resources can be used to support a volume of reading on the unit concepts. These materials may be used during small group instruction and/or independent reading and writing activities to support knowledge building for students and to meet students' diverse learning needs.

TITLE (TEXTS, VIDEOS & ELECTRONIC RESOURCES)	AUTHOR
Wolves	Gail Gibbons
Sea Turtle Hatchlings	Ruth Owen (available on EPIC)
One Tiny Turtle	Nicola Davies
Mister Seahorse	Eric Carle
Platypus, Probably	Sneed Collard III
Seahorse Read and Wonder: The Shyest Fish in the Sea	Chris Butterworth
A Mother's Journey	Sandra Markle (available on EPIC)
The Life Cycle of a Penguin	Colleen Sexton
Penguin Chick	Betty Tatham and Helen K. Davie
Butterfly: How Does It Grow?	Jinny Johnson
Monarch Butterfly	Gail Gibbons
From Caterpillar to Butterfly: Let's-Read-and-Find-Out Science	Deborah Heiligman
A Nest Full of Eggs	Priscilla Belz Jenkins
"Frogs"	Unit from Achieve the Core https://achievethecore.org/page/2436/frogs

"Animal Adaptations"	Unit from Achieve the Core https://achievethecore.org/page/2899/animal-adaptations
Frog (How Does It Grow?)	Jinny Johnson
Lesson 6: "Which Came First, the Chicken or the Egg?" Lesson 7: "The Life Cycle of a Frog" Lesson 8: "The Life Cycle of a Butterfly 101"	CKLA Unit https://www.coreknowledge.org/free-resource/ckla-domain-06-cycles-nature/
Animal Defenses	Etta Kaner
What If You Had Animal Hair?	Sandra Markle
Animal Life Cycles: Growing and Changing	Bobbie Kalman
Animal Life Cycles video	http://www.watchknowlearn.org/Video.aspx?VideoID=25575&CategoryID=6721
Monarch Butterfly Life Cycle video	http://www.watchknowlearn.org/Video.aspx?VideoID=25575&CategoryID=6721
Various Learning Videos such as the "Did You Know" series by Encyclopedia Britannica, Animal Wonders, Inc., and National Geographic Kids	https://www.getepic.com/app/

UNIT VOCABULARY

The following list contains vocabulary words from the interactive read aloud and shared reading texts that warrant instructional time and attention. Teachers should attend to these words **as they are encountered in the texts** to build students' vocabulary and to deepen their understanding of the unit concepts. Educators are encouraged to identify vocabulary that might be unfamiliar to students and to determine how they will teach those words (implicit, embedded, or explicit instruction) based on knowledge of their students. See Appendix C for an example routine for explicit vocabulary instruction.

Note: In addition to this comprehensive list, each question sequence lists the newly introduced vocabulary words that warrant instructional time and attention during the specific reading. These lists also provide guidance as to how the specific words could be taught.

Educators are also encouraged to dedicate a space in their classrooms to record unit vocabulary. This will provide a reference point for the students as they read, write, and talk about the unit topics. Through repeated attention to these words over the course of the unit, students will develop their understanding of these words and will begin to use them in speaking and writing activities.

Disciplinary Understanding	Disciplinary Understanding	Disciplinary Understanding
The patterns of life are cyclical.	Life cycles are unique.	Organisms must survive to be able to reproduce and continue the life cycle.
• life cycle • offspring • reproduction • metamorphosis • larva • hatchling • molt • chrysalis • live born • organism	• arthropods • exoskeleton • amphibian • predators • mammal • instinct • camouflage • migrate • prey • aphids • nymph	• brood

ADDITIONAL VOCABULARY TERMS TO EMPHASIZE DURING INSTRUCTION	
• leathery • current • stages • chamber • emerge • shed • shallows • don • perched • reed	• regurgitate • stimulation • inseparable • nurturing • reassurance • nutrients • weaning • ensure • ultrasound

WHAT IS A LIFE CYCLE? - READING 1, QUESTION SEQUENCE 1, DAILY TASK 1

TEXT
Text: *What Is a Life Cycle?* by Bobbie Kalman
Question Sequence: First Read
Instructional Strategy: Interactive Read Aloud

Note: In many cases, multiple question sequences are included for one text. These sequences intentionally build on each other in service of deepening students' analysis of the text and understanding of the unit's disciplinary and enduring understandings. Teachers may also decide to read the text in its entirety prior to asking questions.

Note: Each instructional strategy has a different purpose. Interactive read aloud is a time for students to actively listen and respond to above grade level complex text. The texts selected for interactive read aloud are intended to build students' comprehension of vocabulary, rich characters, engaging plots, and deep concepts and ideas across a variety of genres. These texts will typically be 1-3 grade levels above what students can read on their own. Shared reading is an interactive experience in which students join in the reading of an appropriately complex text with teacher support. Texts used for shared reading are texts that students can read with teacher support. The purpose of shared reading is to provide opportunities for students to practice their newly acquired foundational skills, develop reading fluency, and build knowledge. These texts should be chosen by considering students' current abilities and the pace at which they need to grow to end the year meeting or exceeding grade-level expectations.

TEXT COMPLEXITY ANALYSIS	
QUANTITATIVE COMPLEXITY MEASURES	
820L	
QUALITATIVE COMPLEXITY MEASURES	
TEXT STRUCTURE	**LANGUAGE FEATURES**
The text structure is very complex. The text is set up as an informational text with a table of contents, headings, text features such as photos, and lots of diagrams with explanations. Graphics, tables, charts, etc. support or are integral to understanding the text.	The language features are very complex. The text has many complex sentences with several subordinate phrases or clauses and transition words. Sentences are compound and complex and include many scientific concepts and vocabulary.
MEANING/PURPOSE	**KNOWLEDGE DEMANDS**
The purpose of the text is slightly complex. Purpose is explicitly stated, clear, concrete, and narrowly focused. The book is very clearly divided into topics, and each topic is narrowly focused upon within those pages.	The knowledge demands for this text are very complex. It relies on moderate levels of discipline-specific or theoretical knowledge and includes a mix of recognizable ideas and challenging abstract concepts. It includes some references and allusions to other texts, outside ideas, and theories. Students will need to have some knowledge of animal classifications and habitats to fully engage with the text.

DESIRED UNDERSTANDING(S) FOR THIS READING

Note: The desired understanding for each reading articulates the disciplinary or enduring understandings students will grasp and/or build on as a result of engaging with the text. The question sequence for each reading will draw students' attention to complex features of the text that will support or challenge students. Over the course of the unit, the desired understandings for each reading build intentionally on one another to provide a coherent learning experience for students. This coherence is also supported through the intentional sequence of texts.

Day 1 – Pages 4-13 (skipping pp. 6-7):

During this reading, students will understand that life cycles happen in all species and are integral to sustain life. Students will also learn that:

- fish, birds and insects start life in an egg.
- different animals lay different kinds of eggs.
- frogs, toads, newts, and many insects undergo metamorphosis.
- before young animals go through metamorphosis, they look very different than their parents.

Note: This book is dense in information and therefore should be spread out over several days to allow students to fully understand content.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- life cycle (explicit)
- stages (explicit)
- organism (explicit)
- offspring (implicit)
- reproducing (implicit)
- metamorphosis (embedded)
- larva (implicit)
- arthropods (implicit)
- exoskeleton (implicit)

Note: Note: The daily tasks build over the course of the unit to support students in developing the knowledge, vocabulary, and skills they will need in order to complete the end-of-unit task. Expectations for students' performance on the daily tasks are aligned with the disciplinary standards and the grade-level literacy standards for writing and speaking & listening.

DAILY TASK

During this part of the reading, we have learned about what life cycles are, as well as the life cycles of a few organisms such as the newt, butterfly, and ladybug. In your journal, write at least 5 sentences on how these life cycles are the same and how they are different. You may also draw and label to help you show what you have learned so far. Introduce the topic, use facts and definitions from our texts to provide information, and provide a concluding statement.

EXEMPLAR STUDENT RESPONSE

All living things go through a life cycle. Some of the stages of the life cycle are the same. All things are born, change as they grow, and become adults. Once they are adults, they start this cycle all over again. Newts, butterflies, and ladybugs go through metamorphosis. Metamorphosis means after they are born, they are one type of thing, like a caterpillar or tadpole, and then they change again into another type of organism, such as a butterfly or newt.

SAMPLE ANCHOR CHART

Teachers may wish to create an anchor chart summarizing information learned during the three readings of this text. **Below is an example of what a completed chart could look like after students experience the third reading of this text.**

Animal	Birth	Growth	Reproduction	How They Survive	Classification
All living things	egg or seed	grow inside egg or seed	produce offspring	continuing the life cycle	
newt	hatches from egg	goes through metamorphosis (tadpole to newt)	lays eggs in water	they can live in different environments	amphibian
butterfly	hatches from egg	goes through metamorphosis (caterpillar to butterfly)	lays eggs on a leaf	they eat nectar from plants	insect
ladybug	hatches from egg (larvae)	goes through metamorphosis (larvae to ladybug)	lays egg near a food source (like a leaf)	They have an exoskeleton to protect them from predators.	arthropod
Frog	hatches from eggs	begins life as a tadpole then grows legs and lungs and turns into a frog	lays eggs in water	They mainly live on land and eat insects.	amphibian
Alligator	hatches from eggs	Carbon copy of their parents. Shed their skin as they grow bigger.	lay their eggs in a safe place	Most types live on land, but turtles, crocodiles, and alligators spend most of their life in the water	reptile
Salmon	hatches from eggs	Eat their yolk sac to help them grow until they are big enough to find their own food	lay eggs in the water	Lay hundreds or thousands of eggs in the hopes some will survive to adulthood	Fish
Ostrich	hatches from eggs	An egg tooth helps it get out of its egg.	lay their eggs in nests on land	Mother birds "brood" the eggs until hatched and then take care of the young until they are old enough to care for themselves.	Birds
Sheep Human Lion	mother gives "live birth"	stays with mother until grown	gives birth in a safe area away from predators	Mothers take care of young until they are old enough to care for themselves.	Mammals

Department of Education

Note: You will not see one specific skill indicated as the focus for the reading. Educators are encouraged to support students in arriving at the desired understandings for the reading by integrating multiple literacy standards. To that end, the question sequences integrate multiple literacy standards. The literacy standards will come into play as students access the rich texts included in the unit starter. In this way, multiple literacy standards naturally support students in accessing and making meaning of the text. Each question sequence drives toward the desired understanding for the reading.

PAGE/ PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
Cover	Looking at the pictures on the cover of this book, what do you think it will be about?	The title says, "Life Cycles," so we think it might be about ladybugs, people, birds, and their lives.
pp. 4-5	The author gave us a lot of information about life cycles on these pages. What is a life cycle?	A life cycle is all the stages a living thing goes through between the time it is born and the time it becomes an adult.
	What are some things the author told us were important about life cycles?	Every living thing has a life cycle. All life cycles go through stages. All living things grow and change throughout their lives.
	I heard someone mention "stages." When we talk about life cycles, what is a "stage"?	A stage is a specific part of the life cycle.
	Why are life cycles so important?	Without a continuing life cycle, animals would not be able to continue to survive.
	What would happen if one of the stages of a life cycle was interrupted?	If an organism could not continue their life cycle, it would die.
	(Add information for "All Living Things" to the anchor chart.)	
pp. 8-9	What types of organisms start their lives in an egg?	Birds, insects, and fish start life in an egg.
	Do all those types of organisms lay the same kinds of eggs? How do you know?	No, all organisms have a specific kind of egg, depending on their species. The illustrations in the book show several different kinds of eggs depending on what species they came from.

	What evidence from the text makes you think that?	The pictures of the eggs in the book are different, so this tells me they are not the same.
pp. 10-11	This section of the text talks about metamorphosis. What is metamorphosis? Using evidence from the text, describe how some organisms are different after they go through metamorphosis. *(Add information for the newt and butterfly to the anchor chart.)*	Metamorphosis is a major change in appearance and behavior that some animals go through between birth and adulthood. The newt starts out inside the egg. It grows and hatches into a tadpole. As it keeps growing, it grows legs and forms lungs to breathe air. Eventually, it becomes an adult newt. The adult newt lays eggs, and the cycle starts over again. The butterfly starts out as an egg. It grows and hatches into a caterpillar. The caterpillar creates a cocoon, where it keeps growing until a butterfly is formed and hatches from the cocoon. The adult butterfly lays eggs, and the cycle starts all over again.
pp. 12-13	Looking at the illustration of the ladybug's life cycle, explain to your partner how it is similar to the life cycle of a butterfly. I heard you say adult ladybugs lay eggs. What would happen if adult ladybugs didn't lay eggs? *(Add information for the ladybug to the anchor chart.)*	The ladybug and butterfly's life cycles are similar because they both start in eggs that hatch and become similar looking (larvae and caterpillars). They both then create a cocoon or covering to change into adults. If adult ladybugs didn't lay eggs, their species would die out. *(Note: If students are having difficulty with this, go back and re-read p. 5, paragraph 2.)*

WHAT IS A LIFE CYCLE? – READING 2, QUESTION SEQUENCE 2, DAILY TASK 2

TEXT

Text: *What Is a Life Cycle?* by Bobbie Kalman

Question Sequence: Second Read

Instructional Strategy: Interactive Read Aloud

DESIRED UNDERSTANDING(S) FOR THIS READING

Note: This book is dense in information and therefore should be spread out over several days to allow students to fully understand content.

Day 2 – Pages 14-21: Students will understand that different types of animals (amphibians, reptiles, fish, and birds) have life cycles that are both similar and different. Specifically, students will learn:

- Amphibian means "double life" (includes frogs, toads, newts, salamanders).
- Amphibians spend the beginning of their lives underwater; then, as they grow, they transition to live on land.
- Amphibians depend on water at all stages of their lives.
- The life cycle of an amphibian (a frog is in the illustration on p. 14).
- Amphibians and reptiles are different. Amphibians go through metamorphosis, and reptiles do not.
- Some reptiles live in the water (turtles, crocodiles, and alligators), and some do not.
- When they are born, reptiles are carbon copies of their parents.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- amphibian (implicit)
- predators (implicit)
- brooding (implicit)

DAILY TASK

Option 1: As we can see through the reading so far, life cycles are vitally important to all living creatures. In your journal, explain why life cycles are important.

Option 2: What kinds of things can impact an organism's life cycle? What would happen if one species' life cycle was destroyed? Why are life cycles important?

Be sure to introduce the topic, use facts and definitions from the text to give information, and provide a concluding statement.

EXEMPLAR STUDENT RESPONSE
The text told us that every living thing has a life cycle. Life cycles are important to all living things. Without a life cycle, animals would not be able to reproduce young. If there was no way to reproduce offspring, eventually the species would die out and be gone forever.

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
pp. 14-15	How is the illustration on page 14 similar to the one we saw yesterday? (*Flip back to page 10).* How are the life cycles of a newt and a frog similar?	The life cycles of a frog and newt are similar because they both start life out as an egg. Both of them have gills when they are babies and live underwater. As they grow up, the gills close, and they grow lungs to be able to live on land. When they are adults, they lay eggs and start the whole process all over again.
pp. 16-17	Based on evidence from the text, how are the life cycles of reptiles and amphibians similar? How are they different?	Both amphibians and reptiles begin their lives in eggs. They are different because amphibians live part of their early lives in the water and depend on water for every part of their life cycles. Reptiles can live on land (snakes and lizards) or in the water (alligators, crocodiles, and turtles). Reptiles are also different because they do not go through metamorphosis. They are born as tiny carbon copies of their parents. When they grow, they shed their skin instead of changing shape all together. Both amphibians and reptiles lay eggs to start the life cycle all over again.
pp. 18-19	Based on evidence from the text, how is the life cycle of a fish similar to the life cycle of a frog?	The life cycle of a fish is similar to a frog's life cycle because they both need water. The difference is that fish need to live in water their whole lives, while frogs can live on land as they grow into adults.
pp. 20-21	Birds are very attentive parents. What facts did the author tell us about how birds care for their eggs and young?	Birds keep their eggs warm by brooding or sitting on them. Some of them even take care of their young after they hatch from the eggs.

	How are the behaviors of birds different from other egg layers?	Other animals that lay eggs leave their young after they are born. The parents do not stay to help them hatch or to take care of them.

WHAT IS A LIFE CYCLE? – READING 3, QUESTION SEQUENCE 3, DAILY TASK 3

TEXT

Text: *What Is a Life Cycle?* by Bobbie Kalman

Question Sequence: Third Read

Instructional Strategy: Interactive Read Aloud

DESIRED UNDERSTANDING(S) FOR THIS READING

Note: This book is dense in information and therefore should be spread out over several days to allow students to fully understand content.

Day 3 – Pages 22-31 (skipping pp. 28-29): Students will understand that mammals' life cycles are very different from most other animals. Any species will die out if there are none left to carry on the cycle of life. This will lead to other species dying out because all species are dependent on other species for survival. Students will learn that:

- Most mammals grow inside their mothers' bodies and are born alive.
- Mammals drink milk from their mothers' bodies until they are old enough to drink on their own.
- Parents care for their young and teach them how to survive.
- Humans are mammals, and human babies grow inside of their mothers.
- When human babies are born, their parents raise and protect them until they are old enough to start a family of their own.
- Predators, pollution, and people can cause life cycles of any species to end.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- mammal (embedded)
- live born (embedded)
- nutrients (implicit)
- weaning (implicit)
- ensure (implicit)
- prey (embedded)
- ultrasound (embedded)

DAILY TASK
Round Robin Writing: Each student in a group of 4-6 will have a specific role (topic sentence, detail sentences, concluding sentences). Students will work together to draft their sentences and then each student will use a different colored pencil/pen to write their precise sentence on a sticky note. This will require all to be engaged and building collaborative speaking and listening skills as well, so their final piece of text is cohesive and representative of the group's understanding and ideas. **Student Instructions:** Explain how a mammal's life cycle is different than other life cycles we have learned about. Be sure to introduce the topic, use facts and definitions from the text to provide information, and provide a concluding statement.

EXEMPLAR STUDENT RESPONSE
Mammals' life cycles are very different than most other organisms' life cycles. Most mammals grow inside their mothers' bodies. They drink milk from their mothers. Mammals are alive when they are born and do not have to have an egg to grow in. Mammals have fewer babies because their parents take care of them when they are growing up. In conclusion, a mammal's life cycle differs from other organisms' life cycles.

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
pp. 22-23	How is a mammal's life cycle different than any of the other organisms' life cycles we have learned about so far? How do you know (based on text evidence)?	Mammals grow inside their mothers' bodies. The babies drink milk from their mothers.
pp. 24-25	These pages talk about how mammals survive. What evidence from the text tells us why mammals do not have as many babies as other species?	They do not have as many babies as other species because their parents take care of them and protect them until they are grown up and can protect themselves. Mammal parents teach their young how to survive.
pp. 26-27	Are humans mammals? What evidence from the text provides evidence for your thinking?	Yes, humans are mammals. Human babies grow inside their mothers. When they are born, their parents take care of them until they are grown up and can take care of themselves.

p. 28	NOTE: READ ONLY PAGE 28. Why is reproduction important to a species?	Reproduction is how living things create offspring. Adults do not live forever, so without reproduction, a species would become extinct or disappear.
pp. 30-31	What are some of the dangers species can encounter during their life cycles? Why is it important to understand and protect the life cycles of every species?	Predators, pollution, and people can cause species to die out. Every life cycle depends on at least one other life cycle for survival. When one is destroyed, it can have an impact on all of the others.

INTO THE SEA – READING 1, QUESTION SEQUENCE 1, DAILY TASK 4

TEXT
Text: *Into the Sea* by Brenda Guiberson **Question Sequence:** First Read **Instructional Strategy:** Interactive Read Aloud

TEXT COMPLEXITY ANALYSIS	
QUANTITATIVE COMPLEXITY MEASURES	
790L	
QUALITATIVE COMPLEXITY MEASURES	
TEXT STRUCTURE	**LANGUAGE FEATURES**
The text structure is moderately complex. *Into the Sea* traces a chronological progression of the life of one sea turtle. However, connections from hatching through various stages of the life cycle are implicit. The text also gently introduces the concepts of the food web and endangerment. The vivid illustrations are detailed and enhance understanding of the text.	The language features are very complex. The text contains subject-specific vocabulary that might be unfamiliar to some readers, including a variety of sea creatures and words like burrows, current, hatchling, marine, and surface. The lyrical, detailed sentences are complex. (For example: "She is not much bigger than a bottle cap and would make a good meal for a hungry sea bird or a crab. But at this moment, at dawn, the crabs are resting in muddy burrows and the beach is quiet and empty.") The text also uses onomatopoeia such as *tap, scritch, thump, scrape, whoosh, and wheeze* to illustrate the sounds the turtles make.
MEANING/PURPOSE	**KNOWLEDGE DEMANDS**
The purpose of the text is moderately complex. The stages of the life cycle of a sea turtle are implied but easy to identify based on the supportive text and illustrations. Readers will also have subtle exposure to the perils the turtle must face throughout its life.	The knowledge demands for this text are moderately complex. Although the text is dense and extensive in content, it reads easily and smoothly and should therefore not really cause problems of comprehension. The author's note at the back, however, is a bit more involved, fact-heavy, and advanced in scope, and thus perhaps is more suitable for older readers (or older listeners).

DESIRED UNDERSTANDING(S) FOR THIS READING

Into the Sea presents the general life cycle of sea turtles in an informative and engaging way, but also points out the many potential threats (both natural and man-made) these beautiful and gentle creatures encounter and endure.

The first reading will be presented with minimal interruptions. The purpose of this reading will be to learn about the life cycle of the sea turtle, from breaking out of a leathery egg on a sandy beach to her return to that same beach more than twenty years later to lay her own eggs.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

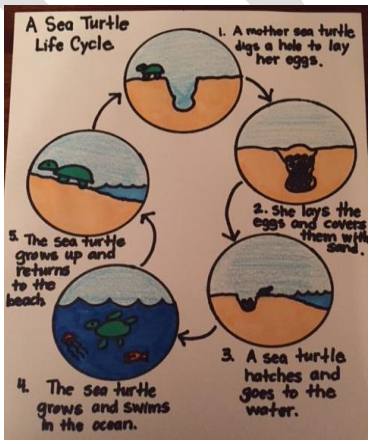
- hatchling (explicit)
- leathery (embedded)
- current (embedded)

DAILY TASK

Students will work in pairs to complete the following task:

What is the life cycle of the sea turtle? Using information from *Into the Sea*, draw and label a diagram of the life cycle of the sea turtle. Each diagram should include at least four of the stages of the turtle's life with arrows connecting each stage in order. Diagrams should also include one complete sentence describing each stage, along with a color illustration for each stage. Be sure to use vocabulary from the text when describing each stage of the life cycle.

EXEMPLAR STUDENT RESPONSE



Each diagram should include at least four of the following stages:

1. a mother sea turtle digging a hole and deep egg chamber
2. a nest of leathery eggs
3. a hatchling emerging from the nest and making its way to the ocean
4. a growing sea turtle swimming in the ocean
5. an adult female sea turtle returning to the beach to lay her eggs

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
p. 1 (...is quiet and empty.)	According to the text, how does the sea turtle begin its life? *(On chart paper, begin recording the names of the stages the turtle goes through. Continue adding to the list throughout the story to support students with their daily task.)*	A sea turtle hatches from a leathery egg within a sandy nest.
Using illustrations and text from *pp. 1-2*	Using the illustrations and words from the text, what do you notice about the hatchling's size at this stage in her life?	The author says the hatchling is tiny. She's not much bigger than a bottle cap. The pictures show how small she is compared to the crab.
Before reading *pp. 6-9* (...and which is the back.)	What does the turtle do during her first few months at sea? How does she change during this time?	She swims and drifts along with the current because she's not very strong yet. She eats tiny plants and grows. She also finds places to hide from creatures with big mouths. Her shell even grows with her and gets harder.
pp. 10-19 (...big gulps of fresh air.)	What changes did you notice as the sea turtle grew into an adult?	The sea turtle has developed her strong muscles to swim deeper and farther into the ocean. She grows into one of the biggest creatures in the sea. Eggs also begin to form in her body.
After reading *p. 25* (...covering them with sand.)	Why does the sea turtle return to land? Use text evidence to describe what she does there.	The female sea turtle returns to the same beach to lay her eggs. She works for a very long time to lay over one hundred eggs. Then, she covers them with sand.

INTO THE SEA – READING 2, QUESTION SEQUENCE 2, DAILY TASK 5

TEXT

Text: *Into the Sea* by Brenda Guiberson

Question Sequence: Second Read

Instructional Strategy: Interactive Read Aloud

DESIRED UNDERSTANDING(S) FOR THIS READING

During the second reading of the text, students will understand and engage in discussion about the dangers the turtle might face and the behaviors that help the sea turtle avoid them. Students will also understand how these instinctual behaviors help to ensure the survival of the sea turtle so that the cycle of life will continue.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- chamber (embedded)
- instinctively (embedded)
- camouflage (implicit)

The following words will be reinforced (after being introduced in earlier texts/readings) in this reading:

- predators

DAILY TASK

Students will individually respond to the following prompts in their journals:

In your opinion, which part of the sea turtle's life cycle is filled with the most danger? How do the sea turtle's behaviors and characteristics help it survive those dangers? Remember to: 1) introduce the topic or text; 2) state an opinion using text evidence; 3) supply a reason to support the opinion; 4) use linking words to connect the reasons to the opinion; and 5) provide a concluding statement or section.

EXEMPLAR STUDENT RESPONSE
Sea turtles experience danger throughout their lives. In my opinion, the most dangerous part of the sea turtle's life is the time after it is first born. If the young hatchling is ever going to make it to the sea, it must escape being eaten by a hungry bird or crab. Plus, the young hatchling has no way to defend itself and no mother there to protect her. Using only her instincts, she moves to the sea and begins to swim along the surface of the water. She also blends in, which keeps her from being seen by fish. These things help her survive this dangerous part of her life!

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
p. 3 (...carries her into the sea.)	I notice the text says, "Always she heads straight for silvery moonlight." What does this mean? How do the illustrations help you understand what the author is saying?	The hatchling heads straight for the ocean. The reflection of the moon on the water draws the sea turtle toward the ocean. The illustrator used shadows and lighter colors to show the moon's light even though you don't see the moon.
Refer back to *p. 4* (...white surface of the ocean.)	The previous page mentioned how the turtle always heads for the moonlight. Now on page 4, we see the word "instinctively." What does "instinctively" mean?	It means that the turtle is doing something without thinking or learning how to do it.
	What does the text tell us that the turtle does "instinctively"?	Without thinking, she always heads straight to the moonlight right after hatching. She also instinctively knows how to paddle and dive.
	How did the young turtle manage to go unnoticed by the "barracuda with a big mouth"?	She has to come up for air a lot. Her underside is white. Her underside blends in with the surface of the water. So, other sea creatures don't even see her.
	How did the illustrator help you understand how she blends in with the surface of the water?	The illustrator used light colors, lines, and shadow effects to make the top of the picture look bright and shimmery. This blends right in with the belly of the young turtle.
p. 6 (...and animals called plankton.)	How does the sea turtle avoid being eaten by "the sharp eyed sea birds" and the "hungry fish"?	The weeds help to camouflage the sea turtle. The sea birds and fish are not able to see her hiding there.

After reading *p. 13* (...living on the extra fat in her body.)	Even though the turtle is now "one of the biggest creatures in the sea," what danger can she still face? What does she do when a shark comes near her feeding area?	She can still get eaten by a shark. She will swim out into a warm current that takes her to deeper water.
After reading *p. 17* (...back across the ocean.)	What characteristic helps the sea turtle avoid being swallowed up by the humpback whale?	The sea turtle has become a strong swimmer. The text says that "she swims swiftly away."
After reading *p. 19* (...taking in big gulps of fresh air.)	The sea turtle faces many dangers. Not all of these dangers are natural predators. How do humans put the sea turtle in danger? What would happen if the sea turtle didn't have natural instincts and behaviors that protect her from all of these dangers?	She can get caught in fishing nets. It is easy for her flippers to get tangled in the ropes. The sea turtle wouldn't survive. She wouldn't be able to head back to the beach to lay her own eggs.
After reading *pp. 22-23* (...where she was born.)	We learned that the sea turtle returns to the land after many years. How does the author help us understand this part of a sea turtle's life?	The author says she waits until night. The author uses the adjectives "slow" and "awkward." She has to stop and rest.
After reading *p. 25* (...covering them with sand.)	Describe how the sea turtle builds her nest in the sand. Why does she build her nest in the sand this way?	She uses her flippers to dig a hole for her body and a deeper chamber for over 100 eggs. After 3 hours, she covers the hole in the sand. The sea turtle buries her eggs deeply and covers them to keep them protected from predators that might want to eat the eggs.
End of the story (to connect back to the beginning of the story and the idea of the continuous nature of the life cycle)	If this story continued, what illustration might you see on the next page? Describe what you visualize to a partner.	Possible responses: The sea turtle doesn't stay to take care of her eggs. Only one or two eggs might survive to come back to lay their own eggs. Students should discuss that the next picture might include a new hatchling emerging from a nest.

	How does what you just visualized compare to the first illustration in the text?	Students will compare their thoughts to those illustrations at the beginning of the text. Ideas might include: "I visualized a baby sea turtle hatching from an egg just like the one on p. 1," or "I visualized a deep chamber with over 100 hundred eggs in it."
	As you think about that new nest of eggs or hatchlings that will continue to grow and move to the sea, what does that help you understand about the life cycle of sea turtles?	Life continues. A new hatchling will grow and repeat the cycle of life.

A Butterfly Is Patient – Reading 1, Question Sequence 1, Daily Task 6

TEXT
Text: *A Butterfly Is Patient* by Dianna Aston and Sylvia Long **Question Sequence:** First Read **Instructional Strategy:** Interactive Read Aloud

TEXT COMPLEXITY ANALYSIS	
QUANTITATIVE COMPLEXITY MEASURES	
1040L	
QUALITATIVE COMPLEXITY MEASURES	
TEXT STRUCTURE	**LANGUAGE FEATURES**
The text structure is very complex. The structure of the text is unconventional; it does not follow the typical left to right progression. The descriptive headings of each section are written in cursive, which may be difficult for younger readers. The book starts with the life cycle of the butterfly, moves to descriptive characteristics and adaptations of the butterfly, and returns to the life cycle with "a butterfly is patient."	The language features are very complex. The text includes many tier 3 vocabulary words: pollinate, nectar, species, predators, environment, migrate, chrysalis, metamorphosis, and molt. Personification is also used to describe the butterfly as patient, creative, and a traveler. The text contains many complex sentences. The book begins: *It begins with an egg beneath an umbrella of leaves, protected from rain, hidden from creatures that might harm it … until the caterpillar inside chews free from its egg-casing, tiny, wingless, hungry to grow.*
MEANING/PURPOSE	**KNOWLEDGE DEMANDS**
The purpose of the text is slightly complex. The purpose is to expose students to the life cycle of the butterfly, along with adaptations and characteristics that allow the butterfly to survive during its life cycle: molting, metamorphosis, helps pollinate, uses wings for camouflage, uses tongue for drinking, uses the wings, and travels for warmth and to lay eggs.	The knowledge demands for this text are moderately complex due to: geographic references (Afghanistan, Canada, Mexico), measurements used to describe the butterfly, and the understanding of the life cycle of a butterfly.

DESIRED UNDERSTANDING(S) FOR THIS READING

Describe each phase of the lifecycle of a butterfly; explain why a butterfly can be described as patient because it has to spend time in each phase of the life cycle before becoming a butterfly.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- molt (implicit)
- chrysalis (implicit)
- emerge (implicit)

The following words will be reinforced (after being introduced in earlier texts/readings) in this reading:

- metamorphosis
- camouflage

DAILY TASK

NOTE: This task is meant to be used with the first IRA of *A Butterfly Is Patient* and the first SR of *My Awesome Summer by P. Mantis*.

In your journal, explain why either the butterfly or the praying mantis could be described as patient. Use details from the text's descriptions of its life cycle to provide information about why it is patient. Be sure to introduce your topic, use facts and definitions from the text to give reasons why the butterfly or praying mantis is patient, and provide a conclusion. Also, please use the word "metamorphosis" in your answer. Finally, illustrate a picture to explain your response.

EXEMPLAR STUDENT RESPONSE

A butterfly is a patient creature. It is patient because it must wait a long time to change into a butterfly. A butterfly starts as an egg. Next, it becomes a caterpillar. Then, the caterpillar becomes a pupa. Last, it comes out as butterfly. It takes 38 days to change. This is called metamorphosis. A butterfly must wait a long time to soar with its wings, so it is patient.

A praying mantis is a patient creature. A praying mantis is patient because it takes several months to develop its wings. A mantis starts as an egg. Next, it sheds its outer skin, which is soft at first, many times. Finally, it gets its wings. This is called metamorphosis. The mantis will then lay its eggs and die. A mantis must wait several months to get its wings, so it is patient.

(Note: Students should draw a diagram of the butterfly's or mantis's life cycle to explain the response. For a butterfly, students should include: egg, caterpillar, pupa, and butterfly in the drawing. For a praying mantis, students should include: egg, shedding skin, wings, and eggs.)

SAMPLE ANCHOR CHART

Teachers may wish to create an anchor chart summarizing information learned during the first readings of *A Butterfly Is Patient* and *My Awesome Summer by P. Mantis*. Below is an example chart following a first reading of both texts. Teachers should add to the chart in tandem with reading each text.

Animal	Birth	Growth	Reproduction	How They Survive	Classification
Butterfly	From an egg	Egg to butterfly in 38 days Molts Forms a chrysalis Changes by metamorphosis Gets 30,000 times bigger Egg, caterpillar, chrysalis, butterfly			Insect
Praying Mantis	From an egg	Baby praying mantis = nymph Molts Gets wings Sheds 8 or 9 times Changes through metamorphosis	Looks for perfect place to lay eggs Dies after lays eggs	Eats aphids	Arthropod

NOTE: Before launching into the question sequence, read the book one time through with minimal interruptions. Then, reread only the selected sections: "A Butterfly Is Patient," "A Butterfly Is Creative," and "A Butterfly Is Patient" (end pages).

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
"A Butterfly is Patient" (beginning)	*(Introduce and explain anchor chart [see sample chart above]. Explain to students that as we read about the butterfly, we will place the information in the chart under the headings: birth, growth, reproduction, and survival.)* I want you to be thinking about this question as we reread a few pages: Why does the author describe the butterfly as patient?	
	The author says, "an umbrella of leaves." What does this mean? Why is this important?	It means the leaves are like an umbrella above the egg that protects it from rain and creatures. An egg needs to be protected so it can eventually hatch.
	How does this page give us information about a butterfly's birth? *(Add to chart under "birth.")*	A butterfly begins its life as an egg.

	Is it a butterfly yet? How do you know? How might this page give us clues to why a butterfly is patient? Turn and talk to your neighbor. *(At this point do not share out loud.)*	It is not a butterfly yet because it is still in the egg, and the author says that it is wingless. The egg is waiting to become a butterfly.
"A Butterfly is Creative"	*(Show students how the labels go up the stem of the plant.)* What information is the author giving us by moving up the plant? *(Add to chart.)* *(Draw students' attention to the time that it takes to go through each stage.)* *(Reread upper paragraph.)* The author uses the word "molt." Why does the butterfly molt? *(Add to chart.)* *(Reread lower paragraph.)* The author uses the word "chrysalis." What does it mean? How do you know? What role does the chrysalis play? Why is it important? *(Add to chart.)* Why is metamorphosis important to a butterfly? What happens when a butterfly undergoes a metamorphosis? *(Add to chart.)* How might this page give us clues to why a butterfly is patient? Turn and talk to your neighbor. *(At this point do not share out loud.)*	The butterfly changes from an egg to a butterfly in 38 days. It has different stages. The butterfly must molt to shed its skin to become bigger. A chrysalis is the protective coating on the outside of the butterfly when it grows wings. It protects the butterfly so it can change. Metamorphosis is important because it lets the caterpillar change into a butterfly. The butterfly undergoes a metamorphosis by changing from an egg to a butterfly. A butterfly is patient because it goes through different stages from an egg, to caterpillar, and then to a butterfly.

"A Butterfly is Patient" (end)	The author uses the word "emerges." What does "emerge" mean?	The word emerge means to move out of something.
"To soar" page	How does a caterpillar emerge?	A caterpillar emerges by coming out of an egg.
	How might this page give us clues to why a butterfly is patient? Turn and talk to your neighbor. *(Allow students to respond. Record on chart.)*	The butterfly has to wait to hatch from an egg and emerge as a caterpillar. Then, it has to wrap itself in a chrysalis to emerge as butterfly. Each of these takes time, so the butterfly has to wait through each stage.

My Awesome Summer by P. Mantis – Reading 1, Question Sequence 1, Daily Task 6

TEXT
Text: *My Awesome Summer by P. Mantis* by Paul Meisel **Question Sequence:** First Read **Instructional Strategy:** Shared Reading

TEXT COMPLEXITY ANALYSIS	
QUANTITATIVE COMPLEXITY MEASURES	
470L	
QUALITATIVE COMPLEXITY MEASURES	
TEXT STRUCTURE	**LANGUAGE FEATURES**
The text structure is slightly complex. While the organization is in the form of journal entries, the clear chronology of the narrative is easy to understand. The illustrations support the meaning of the text by providing visuals of the action in the narrative.	The language features are moderately complex. Personification is used throughout as the praying mantis tells the story in first person. The language is largely conversational, with a few words that might need explanation: shed, pipsqueak, razor arms, aphids, and egg case.
MEANING/PURPOSE	**KNOWLEDGE DEMANDS**
The purpose of the text is slightly complex. The journal entries are used to describe the life cycle of the praying mantis, from emerging from the egg to death after laying her own eggs in the fall.	The knowledge demands for this text are moderately complex. Most students are probably unfamiliar with the life cycle of the praying mantis - or even what a praying mantis is. The author also uses an allusion to Jiminy Cricket.

DESIRED UNDERSTANDING(S) FOR THIS READING
Students will understand the life cycle of the praying mantis from her point of view – from egg, to multiple sheddings, to growing wings, to laying eggs, and finally dying.

TN Department of Education

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- aphids (implicit)
- shed (implicit)

The following words will be reinforced (after being introduced in earlier texts/readings) in this reading:

- metamorphosis

DAILY TASK and EXEMPLAR STUDENT RESPONSE

Refer to the previous daily task and exemplar student response. The first read of A Butterfly Is Patient and My Awesome Summer by P. Mantis have one task combined.

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
Info/Intro	*(Note: The first pages and last pages are not a shared read. Instead, the teacher should read aloud only the first introductory page to provide students with some background information about the praying mantis. The other pages will be read aloud at different points in the question sequence.)* The author of our read aloud described the butterfly as patient. As we read this book together, I want you to consider if the praying mantis is patient. We will continue to add the details to our anchor chart, but we will start a new line about the praying mantis. Why is it called a praying mantis?	The praying mantis got its name because when it folds its legs, it looks like it is praying.
May 17 and May 18	*(Discuss structure of journal. Point out how the dates are listed and what happens each day is underneath.)* *(Choral read.)* Who is telling the story? How do you know?	

	What did we learn about the birth of the praying mantis from these journal entries? *(Add to chart.)*	The praying mantis is telling the story. The author told us it was based on a praying mantis in his backyard. The praying mantis is born from an egg casing. About 150 eggs are in the egg casing.
May 19 - May 24	*(Partner read.)* What does the word "aphids" mean? How do you know? How are aphids important to praying mantis? *(You might provide a little background knowledge after students answer the question that aphids are like plant lice.)* How much time passes between these two entries? How do you know?	Aphids are bugs living on the plants that get eaten by a praying mantis. I know that they get eaten because the mantis says they are soft and delicious. The praying mantis must eat bugs to grow. From May 19 to May 25, five days pass.
June 2 - June 4	*(Partner read.)* What is happening to the praying mantis during this phase of its life cycle? *(Add to chart.)* *(If needed, discuss the meaning of shed.)* Why do you think the mantis sheds its skin? *(Turn and talk.)* What word did we use to describe when a butterfly removes its skin?	The illustration helps us see that the mantis is shedding, or removing, its skin. The mantis may be shedding its skin so it can grow bigger. The word molt also means to remove the skin.
June 27	*(Choral read.)* What do we learn about the mantis's life cycle on this page? *(Add to chart.)*	After hatching, a mantis does not have wings at first, so it must walk wherever it goes.

For a pipsqueak...	The mantis says, "I grabbed him before he could say Jiminy Cricket." Why would the author use this phrase? What is the praying mantis doing with the cricket? Predict why you think this is important.	Jiminy Cricket is the cricket from Pinocchio. The mantis is grabbing a cricket, so the mantis says this to be funny. The praying mantis is going to eat the cricket. This is important because during this phase of its life, it must eat a lot of food.
July 17 and July 19	Read with your partner, and discuss what these two entries tell us about the praying mantis's growth. *(Have students share out answers. Amend chart to say that the mantis sheds its skin many times.)* How much time has passed in the mantis's life? How do you know? What has happened in its life during this time?	These two entries tell me the mantis is growing because it says she sheds her skin again. I also know the mantis is eating her siblings, which may also cause her to grow. Two months and 2 days have passed; the mantis was born on May 17, and now it is July 19. The praying mantis has been born, eaten aphids, shed its skin, and hatched.
July 27 and August 2	*(Choral read.)* What new information do we learn about the praying mantis's life cycle? *(Add to chart.)*	After a mantis sheds, its skin is soft and must harden.
August 9 and August 15	*(Partner read.)* Talk with your partner about how the mantis has changed.	The mantis now has wings.
August 25	*(Partner read.)* How much time has passed in the mantis' life? How do you know? What has happened in its life during this time?	Three months and 8 days have passed; the mantis was born on May 17, and now it is August 25.

		The praying mantis has been born, eaten aphids, shed its skin, hatched, and gotten wings.
Sept. 5 - Sept. 25	*(Choral read.)* What new information do we learn about the mantis's growth? *(Add to chart.)* What does this tell us about the praying mantis? Using what you know about other life cycles, why would the mantis say that she is looking for the perfect branch? Tell your partner.	The mantis shed its skin 8 or 9 times over the summer. It has gotten bigger each time that it has shed its skin. The mantis could be looking for a place to lay eggs, just like the butterfly hid its eggs in an umbrella of leaves.
Oct. 14	*(Partner read.)* What new information about the praying mantis's life cycle could we add to our chart? What will happen when the eggs hatch? What would happen if the praying mantis did not lay eggs?	Under reproduction, we could add that the mantis lays eggs. Another life cycle will start after the eggs hatch. Also, the mantis dies after laying eggs. If the praying mantis did not lay eggs, then new babies would not be born, and the life cycle would not continue.
Oct. 17	What happens to the praying mantis? How do you know?	The praying mantis dies. The praying mantis says goodbye instead of saying good night.
First page in the back cover	*(Read aloud the page to the students. Tell students to listen for new information about the praying mantis's life cycle.)*	A baby praying mantis is called a nymph.
	Based on the text, would we describe the praying mantis as patient? What evidence does the text give? *(Turn and talk.)*	The praying mantis is patient because it takes several months to change from the egg to

		having wings. In this book, it took from May 17 to October 17, which is 5 months.

A Butterfly Is Patient – Reading 2, Question Sequence 2, Daily Task 7

TEXT

Text: *A Butterfly Is Patient* by Dianna Aston and Sylvia Long

Question Sequence: Second Read

Instructional Strategy: Interactive Read Aloud

Note: This interactive reading experience is intended to accompany reading *My Awesome Summer by P. Mantis*.

DESIRED UNDERSTANDING(S) FOR THIS READING

Butterflies have behaviors and traits that help them to survive. They use their wings as camouflage, to attract mates, and to warm themselves. They also drink using their proboscis, or long tongue. Butterflies survive because they travel to find warm climates and to lay eggs.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- camouflage (implicit)
- migrate (implicit)

The following words will be reinforced (after being introduced in earlier texts/readings) in this reading:

- metamorphosis

DAILY TASK

NOTE: This task is meant to be used with the second IRA of *A Butterfly Is Patient* and the second SR of *My Awesome Summer by P. Mantis*.

After a butterfly and a praying mantis become an adult, they each must survive. In your journal, compare and contrast the ways each survives. Be sure to have an introduction and use facts and definitions from our texts to support the similarities and differences. As a conclusion, explain why it is important that they survive.

EXEMPLAR STUDENT RESPONSE

The ways a butterfly and a praying mantis survive are both similar and different. The main ways that they are similar is that they both use camouflage. The butterfly uses its color, and the praying mantis uses its shape to protect itself from predators. They are also similar because the mothers must find a place to lay eggs. The two are also different. The butterfly uses it antennae to find food so it can survive. The praying mantis will eat its own brothers and sisters! It is important that each survives so it can lay its own eggs and start another life cycle.

SAMPLE ANCHOR CHART

Teachers may wish to create an anchor chart summarizing information learned during the second readings of *A Butterfly Is Patient* and *My Awesome Summer by P. Mantis*. Below is a complete sample chart following a second reading of both texts. Teachers should add to the chart in tandem with reading each text.

Animal	Birth	Growth	Reproduction	How They Survive	Classification
Butterfly	From an egg	Egg to butterfly in 38 days Molts Forms a chrysalis Changes by metamorphosis Gets 30,000 times bigger Egg, caterpillar, chrysalis, butterfly	Lays egg	Camouflage Antennae help to find food Scales keep them warm and find mates Migrate during the winter	Insect
Praying Mantis	From an egg	Baby praying mantis = nymph Molts Gets wings Sheds 8 or 9 times Changes through metamorphosis	Looks for perfect place to lay eggs Dies after lays eggs	Eats aphids Camouflage Pretends to be a stick Eats brothers and sisters Can turn head Mother finds perfect branch for eggs Mother spits foam around the egg case	Arthropod

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
"A Butterfly is Protective"	We are going to reread different parts of *A Butterfly Is Patient* and focus in on the last two columns of our chart: reproduction and survival. I want you to be thinking about what actions the butterfly takes or what characteristics the butterfly has that allow it to survive. *(Reread the page.)* What helps a butterfly survive? *(Add to chart.)*	A butterfly's wings help it to protect itself. The wings are used as camouflage.
"A Butterfly is Thirsty"	*(Reread the page.)* How does the butterfly's characteristics help it to survive? *(Add to chart.)*	The butterfly's antennae help it find food.
"A Butterfly is Scaly"	*(Reread the page.)* What information on this page helps us understand how a butterfly is able to survive? How do the characteristics help it to survive? *(Add to chart.)*	The butterfly's scales help it to attract a mate and to keep warm. Finding a mate helps it reproduce, and keeping warm helps it to not die so it can reproduce.
"A Butterfly is a Traveler"	What does the word "migrate" mean? How do you know? *(Turn and talk.)* *(Point out Canada to Mexico on a map.)* How does migration help the butterfly survive?	Migrate means to move from one place to another. The butterfly moves from Canada to Mexico. The butterfly travels to warmer weather in winter.
"A Butterfly is Magical"	How does migration north help the butterfly with survival?	The butterfly lays eggs in North America. This is important so the butterflies are able to reproduce.

MY AWESOME SUMMER BY P. MANTIS – READING 2, QUESTION SEQUENCE 2, DAILY TASK 7

TEXT

Text: *My Awesome Summer by P. Mantis* by Paul Meisel

Question Sequence: Second Read

Instructional Strategy: Shared Reading

Note: This shared reading experience is intended to accompany reading A Butterfly Is Patient.

DESIRED UNDERSTANDING(S) FOR THIS READING

A praying mantis has behaviors and traits that help it to survive. It uses its body shape as camouflage to protect itself. It also eats its brothers and sisters to get enough food and lays eggs in a safe place so they can hatch.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- shed (implicit)
- exoskeleton (implicit)
- prey (implicit)

The following words will be reinforced (after being introduced in earlier texts/readings) in this reading:

- molt

DAILY TASK and EXEMPLAR STUDENT RESPONSE

Refer to the previous daily task and exemplar student response. The second read of A Butterfly Is Patient and My Awesome Summer by P. Mantis have one task combined.

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
Info/Intro	*(Begin with a 2-minute YouTube video about the life cycle of a praying mantis: https://www.youtube.com/watch?v=urk-_Uh2vbg. Before watching, provide the following guidance to students.)* As you watch, think about what new information you learn about the praying mantis's life cycle. Also, how are the real life praying mantises like P. Mantis from our book? *(Note: The teacher should read aloud the second page in the front book cover to provide students with some background information about survival of the praying mantis. Explain that today's focus will be on how a praying mantis survives. Only selected pages will be reread as partners.)* What information does the author give us on how the praying mantis survives? *(Discuss the words "pray" and "prey." Write both words on the board. Explain the difference between the two words. Pray means to talk to god; whereas prey means something that is hunted.)* Think about reading this story yesterday. What were prey of the praying mantis?	A praying mantis sheds its skin up to 10 times. Molting is the shedding of its skin. The outer part of the body is the exoskeleton. P. Mantis and real life praying mantises both go through a metamorphosis through their life cycle by shedding skin, growing bigger, and getting wings. They use their legs to catch prey. They use camouflage to stay safe from predators. Aphids and other praying mantises are prey.
May 24	*(Reread as partners.)* What is the praying mantis' cool trick? Why does he use it? *(Add to survival column.)* How is this trick similar to the butterfly? Turn and talk. *(Add to survival column.)*	A praying mantis' cool trick is that it pretends to be a stick to avoid predators. It is important to avoid predators so it can continue its lifecycle. A praying mantis pretends to be a stick just like the butterfly uses its colors to camouflage itself.

June 2	*(Reread as partners.)* What do we learn that the mantis does to survive? *(Add to chart.)* Is this a characteristic or behavior? Why?	The praying mantis eats its brothers and sisters to survive so it can have enough food to undergo changes. This is a behavior because it is an action the praying mantis takes for survival.
June 27	*(Reread as partners.)* How does the "cool trick" help the mantis survive?	Because the praying mantis blends in, the dog cannot see or bother her.
July 27	*(Reread as partners.)* How might the praying mantis' ability to turn its head help it to survive? Why is this important? Try to use the word "prey" in your response. *(Turn and talk.)*	The praying mantis could see more predators with its ability to turn its head. This is important because the praying mantis does not want to become the prey of another animal.
July 29	*(Reread as partners.)* How does the camouflage trick help the praying mantis survive in a different way? *(Add to chart.)*	The camouflage helps it hide so it can catch prey. The ability to catch prey is important so it has enough food to survive.
Sept. 25 - Oct. 14	*(Reread as partners.)* How does the mother praying mantis protect its babies? *(Add to chart.)* With your partner, discuss all the ways that a praying mantis survives.	The praying mantis mother must find the perfect branch to hide the egg case from predators. It also spits a foam around the egg case to protect it. A praying mantis is able to survive because it uses the shape of its body to camouflage itself. It also eats its brothers and sisters to get enough food and lays eggs in a safe place so they can hatch.

Last page of book cover	*(Read aloud the last page of book cover. Have students listen for new information about survival.)* What new information did we learn about survival?	The praying mantis defends itself with sharp forearms. They also make a hissing sound. Even though it can defend itself, it is not a match for some creatures like a bat, spider, bird, frog, or lizard.

"Fly, Dragonfly!" – Reading 1, Question Sequence 1, Daily Task 8

TEXT
Text: "Fly, Dragonfly!" by Joyce Sidman **Question Sequence:** First Read **Instructional Strategy:** Shared Reading

TEXT COMPLEXITY ANALYSIS	
QUANTITATIVE COMPLEXITY MEASURES	
Poem (No Lexile)	
QUALITATIVE COMPLEXITY MEASURES	
TEXT STRUCTURE	**LANGUAGE FEATURES**
The text structure is slightly complex. The organization is clear, chronological, and easy to predict. The text includes no graphics.	**Conventionality:** This short poem contains abstract, and/or figurative language (for example, "…climbed from the shallows to don your dragon-colors"). Also, the poet uses the phrase, "Night melts into day," to indicate a passage of time. One last example is, "Swift birds wait to snap you up." Very complex. **Vocabulary:** The poem contains vocabulary that is sometimes unfamiliar, content-specific, multiple-meaning, and ambiguous (e.g., don, nymph, shallows, snap, melts). Very complex. **Sentence Structure:** Poetic; primarily simple and compound sentences with some complex construction (e.g., "Perched on a reed stem all night," "shedding your skin," "you dry your wings in moonlight"). Moderately complex.
MEANING/PURPOSE	**KNOWLEDGE DEMANDS**
The text is slightly complex. The text has one level of meaning, and the theme is obvious.	The text has a single theme. Experiences portrayed are likely uncommon to most readers; second grade students may need background information on the life cycles of dragonflies. Knowledge demands are very complex.

DESIRED UNDERSTANDING(S) FOR THIS READING

The desired understanding for this poetry reading is to learn about the stages of a dragonfly's life cycle and the dangers faced as it progresses through those stages. This knowledge, in addition to the understanding(s) from *My Awesome Summer by P. Mantis* and *A Butterfly Is Patient,* will be used to compare and contrast the life cycles of insects and exemplify diversity and uniqueness of life cycle stages.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- nymph (explicit)
- shallows (embedded)
- don (embedded)
- perched (embedded)
- reed (embedded)
- melts (explicit)
- snap (explicit)

The following words will be reinforced (after being introduced in earlier texts/readings) in this reading:

- nymph
- shedding

DAILY TASK

In this shared poetry reading, students will work in pairs or small groups to compare and contrast the life cycle of a dragonfly, a praying mantis, and a butterfly while recalling information from *My Awesome Summer by P. Mantis* and/or *A Butterfly Is Patient*.

Today we are going to use our learning from "Fly, Dragonfly!", *My Awesome Summer by P. Mantis,* and *A Butterfly Is Patient* to answer questions about similarities and differences between the life cycles of the dragonfly, the praying mantis, and the butterfly. In your own words, answer these questions:

1. What is at least one way the dragonfly's life cycle is similar to the praying mantis' life cycle?
2. What is at least one way the dragonfly's life cycle is different from the butterfly's life cycle?
3. Using information from our learning, describe which animals prey on dragonflies, praying mantises, and butterflies. What do the authors want you to know about the life cycles of these insects?

Remember to write in complete sentences and use evidence from our texts. Share your thoughts from your paper by reading your response with your partner (or small group).

EXEMPLAR STUDENT RESPONSE
What is at least one way the dragonfly's life cycle is similar to the praying mantis' life cycle? When I read about the dragonfly and the praying mantis, I noticed both insects start out as nymphs and then they molt. Because the praying mantis and the dragonfly go from egg, to nymph, to adult, they both go through incomplete metamorphosis. **What is at least one way the dragonfly's life cycle is different from the butterfly's life cycle?** The dragonfly's life cycle is different from the butterfly because the butterfly goes through complete metamorphosis. When a dragonfly changes to an adult, it doesn't go through the caterpillar stage like the butterfly does. **Using information from our learning, describe which animals prey on dragonflies, praying mantises, and butterflies. What do the authors want you to know about the life cycles of these insects?** Birds like to eat dragonflies, praying mantises, and butterflies for a tasty meal! (Yuck!) Predators are dangerous for animals, so I think the authors want us to know not all insects will live through the complete life cycle; some may get eaten after they turn into an adult.

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
Line 1	I notice the author is talking about a water nymph, but the title mentions a dragonfly. Based on our reading of *A Butterfly Is Patient* and *My Awesome Summer by P. Mantis,* what is the relationship between a water nymph and a dragonfly? Why do you think this?	We learned that a nymph is a baby of an insect. I think the water nymph is the baby dragonfly, and the poem is starting from when the dragonfly is born.
Line 2	Now we know the nymph is the baby dragonfly, and this line tells us it climbed. Ms. Sidman used the words "from the shallows to don." What do you think this poet means by "climbs from the shallows"?	The words water and shallow make me think of my swimming pool. When I swim out of the water, I come from the bottom to the top of the pool. This nymph is crawling from the shallow water, where it was born, to the top of the water.
Line 2	Why doesn't the author just say the nymph comes out from the bottom of the water?	It sure makes me think more when the poet uses different words. I think she did it to make us think hard and have fun with new words.

Line 2	Line 2 says, "climbed from the shallows to don." Now we know the nymph climbed out of the water, and the author continues by saying, "to don your dragon-colors." Based on what you know from our last two texts, was the nymph born looking exactly like the adult dragonfly? Provide reasoning based on your previous learning.	I don't think the nymph is the same color as the adult dragonfly because Ms. Sidman said the nymph gets on its dragon colors. We learned the praying mantis doesn't change colors, but the butterfly does change colors as it goes through its life cycle.
Line 3	The author uses the word "dragon-colors." What does she want us to know about the nymph now?	The author wants us to know the dragonfly changed colors and now it looks like a dragonfly we would see flying around. It's going through its life cycle. Now it's an adult!
Line 2	With that information, what do you think "don" means?	I would have said the nymph climbed out of the shallow water and then it changed or got its new colors that an adult dragonfly has. I think "don" means to "get on" or "put on."
Lines 4 & 5	Tell me where the nymph is and what it's doing. Why? *(If students struggle with the words perch and reed, support these understandings as needed.)*	Ms. Sidman is telling us the nymph is sitting on a plant near the water and is getting rid of its skin or shell that it was born with. I think it's molting like the butterfly and the praying mantis did in our other stories.
Lines 5 & 6	As the nymph continues through its life cycle stages, what change is happening on lines five and six?	The nymph has molted its skin, and the wings are drying out. I think this is kind of like when the butterfly comes out of the chrysalis. It's becoming an adult!
Line 7	Ms. Sidman informs us, "Night melts into day." In your own words, describe what the author wanted you to know about the dragonfly and why you think the author chose to use these words. Use evidence from the poem. What does "melt" mean in the poem?	I think Joyce Sidman wrote the words "Night melts into day" to tell us it took several hours for the dragonfly's wings to dry, and that they dried overnight. I know it was overnight because the author uses the word "moonlight" as a clue. The word melts is a fun way to tell how this change didn't happen quickly like ice cream sitting in a bowl on the counter. Using fun words makes poems and stories more fun to read.

Line 8	As I read line eight again**, "Swift birds wait to snap you up,"** I notice the author has introduced another animal. Based on our texts about the praying mantis and butterfly, why do you think the author tells us about swift, which means fast, birds?	In the other books, both kinds of insects faced danger from other animals, and this author tell us the birds were fast. She is telling us that fast birds were around the dragonfly, and they prey on dragonflies. If the birds eat the dragonflies, they won't live or be able to continue in the life cycle. Being a little dragonfly is dangerous!
Line 8	*(Teacher snaps fingers.)* How does a bird snap up a dragonfly? I didn't know they could make a sound with their little feet. What do you think "snap" means in this sentence?	Birds can't snap their feet, Silly! The poet means the fast bird wanted to GRAB the poor innocent dragonfly.

ALTERNATIVE SHARED READING OPTIONS

Other options for aligned shared reading experiences that may be more appropriate for a different point in the year include the following:

http://s2.dmcdn.net/Hmw8j/526x297-Sat.jpg

http://www.scholastic.com/teachers/sites/default/files/posts/u133/images/thematic_song.png

http://images.scholastic.co.uk/assets/a/de/b4/cetifc0606-sip-1-443484.jpg

https://i.pinimg.com/736x/e7/31/cc/e731cc259e8b2d5d9eceb43b6e6268b1--science-poems-penguin-life.jpg

http://www.clker.com/cliparts/3/d/7/6/12705964566052658 30sea%20turtle%5D.png

https://poetryadvocates.files.wordpress.com/2012/07/water-sings-blue_int_octopus-ink.jpg

Note: The texts selected for shared reading are intended to provide opportunities for students to practice newly acquired foundational skills, to develop reading fluency, and to build knowledge across a variety of genres. Shared reading texts should be appropriately complex text that students can read with teacher guidance and support. Teachers will need to take grade-level and time of year into account when deciding if the shared reading texts are appropriate for their students. Teachers will also need to consider students' current abilities and the pace at which students need to grow to meet or exceed grade-level expectations by the end of the year. If the shared reading texts included in the unit starter are not appropriate for the specific group of students and time of year, educators are encouraged to make an informed decision about selecting a different text for shared reading. The shared reading texts with question sequences in this unit starter are appropriate for instruction closer to the end of the academic school year. However, as you see here, different texts may be more appropriate if this unit starter is used at a different point in the year.

TEXT
Text: *Born in the Wild: Mammals and Their Parents* by Lita Judge **Question Sequence:** First and Second Reads **Instructional Strategy:** Interactive Read Aloud

TEXT COMPLEXITY ANALYSIS	
QUANTITATIVE COMPLEXITY MEASURES	
AD900	
QUALITATIVE COMPLEXITY MEASURES	
TEXT STRUCTURE	**LANGUAGE FEATURES**
The text structure is moderately complex. *Born in the Wild* is organized around nine concepts that divide the 48-page book into sections. Each section clearly identifies an important mammal characteristic. Detailed illustrations and paragraph-long vignettes describing how the animals are cared for and slowly gain independence supplement a deeper comprehension of the text.	The language features are very complex. This text contains several examples of complex vocabulary that might be unfamiliar to 2nd grade students. Some examples include: caressed, groomed, stimulation, inseparable, and reassurance. Other vocabulary is also subject specific and relates specifically to animals. Some examples include: regurgitating, defenseless, mob, marsupial, and prowl. The descriptive vignettes contain complex sentences.
MEANING/PURPOSE	**KNOWLEDGE DEMANDS**
The purpose of the text is slightly complex. The focus of this text is explicitly stated, and the traits that all baby mammals share are explored in a concrete way. The author clearly states that, even though these mammals are born in the wild, they're not so very different from us.	The knowledge demands for this text are moderately complex. Students will begin to build understanding about mammal needs by drawing on background knowledge of the more familiar animals in the text. However, students will most likely be unfamiliar with some of the more exotic animals included in the text. Although many of the details about parental care will be unfamiliar to students, they will make connections to their own lives, pets, and animals near them.

DESIRED UNDERSTANDING(S) FOR THIS READING

This text explores the traits that all baby mammals share and proves that, even though they're born in the wild, they're not so very different from us.

Baby mammals are born through live birth and have similar needs as they grow and learn, but ways in which parents support the needs of their offspring may be unique to their species. On the first read through the text, direct students to listen for those common needs most mammals share. Begin by reading only the larger phrases as students observe the illustrations. For example, "A baby is born. The baby is hungry. The baby needs protection."

First Read: During the first read when the text is read in its entirety, students will be exposed to the many mammals so beautifully illustrated in this text and the reading of the main sections of the text, which identify the important characteristics all mammal young share (for example, "The baby is hungry!").

Second Read: The desired understanding students will build through the second reading of this text is that mammals' behaviors help their babies survive. Through this reading, students will also make connections between the number of offspring animals have, the level of care from the parent, and the survival of the species.

Students may be interested in learning additional information about certain animals. Please use the resources at the end of the text for more exploration, if desired.

VOCABULARY WORDS

The following words are introduced during this reading. Suggested instructional methods are included in parentheses.

- regurgitate (embedded)
- predators (embedded)
- stimulation (embedded)
- inseparable (embedded)
- nurturing (embedded)
- reassurance (embedded)

DAILY TASK

After both reads of the text:

In your journal, describe how mammals' care for their young helps them survive, individually and as a species. Remember to use complete sentences, introduce your topic, use facts from the text we've just read, and provide a concluding statement.

EXEMPLAR STUDENT RESPONSE
Animals must be able to survive on their own. Mammal parents provide extra care and teaching for their babies so that they can survive. First, a baby mammal drinks its mother's milk until it's ready to eat real food. A grizzly bear cub might drink milk for two or three years. A baby mammal also gets protection from its family. A whole musk ox herd will make a circle around a little calf to keep it safe from being attacked. Playing also helps baby mammals learn important skills they need when they become adults. For example, baby lemurs practice hopping so they will be able to leap through the trees later. Lastly, they are taught how to find food. A sea otter pup watches his mother swim and dive to find clams and urchins. Because of all this care and teaching, mammals don't have so many young at once in order for their species to continue.

PAGE/PART OF TEXT	QUESTION SEQUENCE	EXEMPLAR STUDENT RESPONSE
Read the text through in its entirety. <u>After the first reading</u>:	What do most mammal babies need? (Use evidence from the text.) *(If students have difficulty recalling needed information, you may choose to refer back to <u>What Is a Life Cycle?</u> pp. 22-25, the round robin writing from task 3, or the animal anchor chart as needed.)* *Think-Pair-Share: Record a list of student responses on chart paper, summarizing and paraphrasing thoughts into big ideas, as needed.*	mother's milk to be safe a home to move a family to be cared for to play to learn things
<u>During the second reading of the text:</u> After *p. 8* (grizzly bear, wolf, and guanaco)	How do wolf parents help their pups eat until they get their adult teeth? What might happen to the baby wolves if the mother didn't do this?	The adult wolves chew up the meat and regurgitate it. They have to because the meat is too tough for the wolf pups' tiny teeth. The wolf pups would not get enough food to keep them healthy and grow.
After *p. 12* (deer, panda, and musk ox)	How do different animals depend on their parents to keep them from danger?	The mother deer hides her fawn and teaches it to be perfectly still. She stays away most of the time to keep the predators away from the hiding place. A mother panda holds her baby for several days without even putting him down to eat or drink. A musk ox family will

		make a circle around a new calf to protect it from being attacked.
	Why is it important that predators stay away from the fawn's hiding place?	The fawn is defenseless and would have no way to protect itself from a hungry predator.
	What would happen to the baby panda if the mother put it down?	The baby panda isn't even strong enough to support its own weight. It wouldn't be able to survive.
	What might happen to the calf if the herd didn't behave in this way?	The musk ox calf is also defenseless against hungry wolves. The wolves would easily attack and kill the calf.
After *p. 20* (kangaroo, opossum, plains zebra)	According to the text, what are some ways babies stay safe with their mothers?	A joey stays safe in its mother's special pouch. Opossums cling to their mothers' backs as they roam. Zebra colts are able to leap and run with their mothers within hours of their birth!
	Why is it important for babies to stay with their mothers?	A newborn will be safer with its mother. All alone, the baby would be easily attacked by a predator.
After *p. 24* (hippopotamus, red fox, meerkat)	With a partner, discuss the following questions:	
	How do animals work together to care for their young?	Some animals work in a team to care for the young of the group. All members of the family have a part in their care. A meerkat family may have two to four pups at once. The mothers will gather together with their babies to keep them safe. The job of a father fox is to bring back food to the den and help protect them. A meerkat mob includes parents, older siblings, cousins, aunts, and uncles, who all work together to protect and teach the new pups.
	What might happen if these animals cared for their young on their own?	The animals might be in more danger because they wouldn't have the protection of many adults. They wouldn't get as much

		stimulation and attention. They wouldn't learn as much about being a part of a community.
After *p. 32* (lemur, lion, mountain goat)	How does "play" help young animals survive? What are some examples from the text?	Play time helps the young animals practice skills they will use as adults. A young lemur practices hopping so that one day it can leap through trees. A lion cub must practice stalking, running, and attacking through games so that they can survive when they are older. Mountain goats practice pushing and shoving so that they can compete against other male goats when they become adults.
After *p. 36* (pika, sea otter, orangutan)	According to the text, what are some things a young mammal must learn before they reach adult stage? What might happen if they don't learn those things? How could this impact their life cycles and survival? Discuss this with a partner.	Young mammals must learn to hunt for food. They learn signals that danger is near. They may also learn to swim, crack open shells, use sticks for tools, or build a nest. If the young mammals don't learn these important things, they will not survive to adulthood. If they don't survive, they won't be able to have babies on their own.
After reading *p. 38* (...just like you!)	How is the way mammals care for their young similar or different from how the other animals we have studied (sea turtle, praying mantis, butterfly) care for their young? *(Turn and talk.)* How do other species survive if their parents don't take care of them?	Mammals care for their young after they are born. This extra care means that they don't have to have so many babies at once in order to help their species survive. Birds also are careful parents to make sure their young survive. This is very different from a sea turtle that lays over one hundred eggs and then leaves the nest. Like the turtle, fish lay many eggs because only a few survive. However, some fish protect their young from predators. Some animals use their instincts to survive. The sea turtle's behaviors include heading toward the ocean, where it paddles and hides without being taught. Some animals have characteristics that help them survive. Butterflies have markings on their wings that scare away predators or keep them camouflaged. Other species lay a lot of eggs

	Why do mammals have fewer babies than other species? How does this ultimately impact mammals' parenting behaviors?	because many of them will not survive. Mammals have fewer babies and parent mammals tend to provide more protection and care because it is more important for the survival of the species that babies survive to adulthood so they can have babies of their own.

END-OF-UNIT TASK

Note: The end-of-unit task gives students the opportunity to answer the essential questions for the unit and to demonstrate their understanding of the unit concepts. The end-of-unit task prompts student thinking, speaking, and writing about unit texts that reflects the demands of the grade-level literacy standards. In addition, the end-of-unit task provides students a chance to demonstrate their understanding in an authentic and meaningful context.

END-OF-UNIT TASK

You are the Animal Ambassador at the local zoo. At the zoo's learning center, your job is to teach school groups about animals' life cycles, behaviors, and characteristics. Using information from our texts in this unit, select at least two animals with different life cycles. Your boss has asked you to turn in a written copy of your explanation for how your animals' life cycles are similar and different before you teach the first group of students. Be sure to include: (1) how each animal changes throughout all stages of the life cycle, (2) how the animals' or their parents' behaviors help them survive, (3) how the animals' characteristics help them survive, and (4) at least two life cycle illustrations.

In your written copy to your boss:

- Introduce each animal.
- Use unit facts, vocabulary, and definitions from the texts to compare and contrast the life cycles of at least two different animals.
- Provide a conclusion.
- Use evidence from all information you have learned in the unit.
- Write in complete sentences, and use correct capitalization, punctuation, and spelling.

Your boss also wants you to practice presenting to your fellow ambassadors.

A Venn diagram may be helpful prior to writing to allow you to organize your thinking. You may also use your journal, diagrams, round robin writing (with student roles and collaborative discussion as detailed in previous daily tasks), and anchor chart for support.

STUDENT RESPONSE

Both the sea turtle and the sea otter spend much of their lives in water. As young animals, they both float along and sometimes take a deep breath to dive for food so that they can grow stronger. However, they are also different in many ways.

First of all, a sea turtle reproduces by laying a nest full of more than one hundred eggs near the sea. A mother sea otter gives birth to one pup right in the water. Also, a sea turtle is born with a shell that grows and hardens as it gets older. The shell helps it stay safe from predators. A sea otter is born with a full coat of fur that helps keep the pup afloat. When they get tired, the young animals must stop to rest. A sea turtle must find a clump of seaweed to rest on. In contrast, a sea otter pup rests on its mother's belly as she floats.

Both of these animals must learn to swim in order to survive, but the sea turtle hatchling crawls straight to the water right after it leaves the nest. Somehow, it just knows how to swim! The sea turtle relies on instincts, but the otter learns to swim after about four weeks with the help of its mother. She teaches him to swim, dive, and crack open tough shells.

From the beginning of their lives to surviving as an adult, you can see that these two animals are unique and diverse in many ways!

TN Department of Education

END-OF-UNIT TASK RUBRIC

Second Grade Student Culminating Task Rubric

Life Cycles/Survival Characteristics and Behaviors

Note: The end-of-unit task rubric is designed to support educators in determining the extent to which students' responses meet the grade-level expectations. This rubric will also help teachers analyze the extent to which each student understands the unit concepts and understandings.

Directions: After reading and reflecting on the student work sample, score each area and total the rubric score at the bottom. Note that this rubric is designed to look at student work samples in a holistic manner.

	Below Expectation (0)	Needs More Time (1)	Meets Expectation (2)	Above Expectation (3)
Content (Text-based evidence)	Writes to explain the life cycle of **1** animal	Writes about **2** animals but does not explain the similarities and differences	Writes to explain the similarities and differences of life cycles of **at least 2** different animals	Writes to explain the similarities and differences of life cycles of **at least 3** different animals
Word Choice (Content Vocabulary)	Uses **little** science content vocabulary to explain life cycles and survival	Uses **some** science content vocabulary to explain life cycles and survival	Uses **adequate** science content vocabulary to explain life cycles and survival	Uses **insightful** science content vocabulary to explain life cycles and survival
Mechanics	Uses **little** punctuation and capitalization	Uses **some** punctuation and capitalization	**Mostly** uses punctuation and capitalization	**Consistently** uses punctuation and capitalization
Structure	**Writing omits an introduction and conclusion**, and includes **few detail sentences**	Writing **omits an introduction or conclusion**, and includes **some detail sentences**	Writing includes an **introduction, detail sentences**, and a **conclusion**	Writing includes **a clear introduction, many key details,** and a **clear conclusion**
Illustrations	**1 life cycle** illustration with little or no details or labeling	**2 life cycle** illustrations with limited details and limited labeling	**At least 2** life cycle illustrations are present with detailed illustrations and descriptive sentences.	**More than 2** life cycle illustrations are present with detailed illustrations and descriptive sentences.

Total: _____

Above Expectation: 14 -15 points

Meets Expectation: 10-13 points

Needs More Time: 5-9 points

Below Expectation: 0-4 points

*Points are not designed to be averaged for a grade.

APPENDIX A: UNIT PREPARATION PROTOCOL

Question 1: What will students learn during my unit?

Review the content goals for the unit, and identify the desired results for learners.	
• What are the concepts around which I will organize my unit (*universal concept, unit concept*)? • What will students come to understand through deep exploration of these concepts (*essential questions, enduring understandings*)?* • What disciplinary knowledge will focus instruction and provide the schema for students to organize and anchor new words (*guiding questions, disciplinary understandings*)? • Why is this content important for students to know? *Adapted from McTighe, J. & Seif, E. (2011), Wiggins, G. & McTighe (2013).	

Question 2: How will students demonstrate their learning at the end of my unit?

Review the end-of-unit task and the exemplar response to determine how students will demonstrate their learning.	
• How does the task integrate the grade-level standards for reading, writing, speaking and listening, and/or foundational literacy in service of deep understanding of the unit texts and concepts? • How does the task call for students to synthesize their learning across texts to demonstrate their understanding of the unit concept? • How does the task call for students to use appropriate details and elaborate on their thinking sufficiently? • How does the task prompt student thinking and writing that reflects the grade-level expectations? • What is the criteria for success on this task? What does an excellent response look/sound like?	

Question 3: How will students build knowledge and vocabulary over the course of the unit?

Read each of the texts for the unit, and consider how the texts are thoughtfully sequenced to build world and word knowledge.	
• How are the texts sequenced to build knowledge around the unit concepts? • How are the texts sequenced to support students in developing academic and domain-specific vocabulary? • Which instructional strategies are suggested for each text? How will I sequence them within the literacy block?	

Question 4: What makes the text complex?

You are now ready to prepare at the lesson level. To do this, revisit the individual text. Review the text complexity analysis and read the desired understandings for the reading.	
• What aspects of this text (structure, features, meaning/purpose, knowledge) are the most complex? • What aspects of the text are most critical for students to comprehend to ensure they arrive at the desired understanding(s) for the reading? • Where might you need to spend time and focus students' attention to ensure they comprehend the text?	

Question 5: How will I help students access complex texts during daily instruction?

Review the question sequence, and reflect on how the questions support students in accessing the text.	
• How does the question sequence support students in accessing the text and developing the desired understanding(s) of the reading? • How does the question sequence attend to words, phrases, and sentences that will support students in building vocabulary and knowledge? • How are the questions skillfully sequenced to guide students to the desired understanding(s) of the reading? • How will you ensure all students engage with the questions that are most essential to the objectives of the lesson? (Consider structures such as turn and talk, stop and jot, etc.) • How will you consider additional texts, or additional reads of the text, to ensure students fully access and deeply understand the text? • Are there any additional supports (e.g., modeling, re-reading parts of the text) that students will need in order to develop an understanding of the big ideas of the text and the enduring understandings of the unit?	

Question 6: How will students demonstrate their learning during the lesson?

Review the daily task for the lesson to determine what students will be able to do at the end of the lesson.	
• How does the task require students to demonstrate their new or refined understanding? • How does the task call for students to use appropriate details and elaborate on their thinking sufficiently? • How does the task prompt student thinking and writing that reflects the grade-level expectations? • How does this task build on prior learning in the unit/prepare students for success on the end-of-unit task? • How will students demonstrate their learning during other parts of the lesson? • What is the criteria for success on this task? What does an excellent response look/sound like?	

Question 7: What do my students already know, and what are they already able to do?

Consider what your students already know and what they are already able to do to support productive engagement with the resources in the unit starter.	
• What knowledge do my students need to have prior to this unit? • What do my students already know? What are they already able to do? • Given this, which/what components of these texts might be challenging? Which/what components of these tasks might be challenging? • What supports will I plan for my students (e.g., shifting to a different level of cognitive demand, adding or adjusting talking structures, adding or adjusting accountable talk stems into student discussions, providing specific academic feedback, or adding or adjusting scaffolded support)? • How can the questions and tasks provided in the unit starter inform adjustments to upcoming lessons?	

Question 8: What content do I need to brush up on before teaching this unit?

Determine what knowledge you as the teacher need to build before having students engaged with these resources.	
• What knowledge and understandings about the content do I need to build? • What action steps can I take to develop my knowledge? • What resources and support will I seek out?	

APPENDIX B: LESSON PREPARATION PROTOCOL

Question 1: What will students learn during this lesson?

Review the desired understanding(s) for the reading. Then read the daily task and the desired student response.	
• What is the desired understanding(s) for this reading? • How does this desired understanding build off what students have already learned? What new understandings will students develop during this reading? • How will my students demonstrate their learning at the end of the lesson? • How does the desired understanding for this reading fit within the larger context of the unit?	

Question 2: How might features of the text help or hold students back from building the disciplinary and/or enduring understandings?

Read and annotate the lesson text and review the associated text complexity analysis.	
• Where in the text will students be asked to make connections to what they already know? Where in the text will students build new knowledge? • What aspects of the text (structure, features, meaning/purpose, knowledge) might help or hold students back from building the disciplinary and/or enduring understandings? • Where do I need to focus students' time and attention during the read aloud/shared reading?	

Question 3: How will I support students in accessing this text so they can build the disciplinary and/or enduring understandings?

Read through the question sequence and the desired student responses.	
• Which question(s) are crucial and most aligned to the desired understandings? What thinking will students need to do to answer the most important questions? • Which questions target the aspects of the text that may hold students back from building the desired disciplinary and/or enduring understandings? • Are there adjustments I need to make to the questions or their order to meet the needs of my students - while assuring students are still responsible for thinking deeply about the content? • What do I expect to hear in students' responses? How will I support to students who provide partial or incomplete responses in developing a fuller response?	

APPENDIX C: USEFUL PROCEDURAL EXAMPLES FOR EXPLICIT VOCABULARY INSTRUCTION

Example 1:

- Contextualize the word for its role in the text.
- Provide a student friendly definition, description, explanation, or example of the new term along with a nonlinguistic representation and a gesture.
- Provide additional examples, and ask students to provide their own examples of the word.
- Construct a picture, symbol, or graphic to represent the word.
- Engage students in lively ways to utilize the new word immediately.
- Provide multiple exposures to the word over time.

-Beck et al., 2002; Marzano, 2004

For a specific example, see the shared reading webinar presentation found here.

Example 2:

- Say the word; teach pronunciation.
- Class repeats the word.
- Display the word with a visual, read the word, and say the definition using a complete sentence.
- Have the class say the word and repeat the definition.
- Use the word in a sentence: the context of the sentence should be something students know and can connect with.
- Add a gesture to the definition, and repeat the definition with the gesture.
- Students repeat the definition with the gesture.
- Have student partners take turns teaching the word to each other and using the word in a sentence they create.
- Explain how the word will be used in the text, either by reading the sentence in which it appears or explaining the context in which it appears.

- Adapted from *50 Nifty Speaking and Listening Activities* by Judi Dodson